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LOGIC AND PROFESSOR ANDERSON.

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PROFESSOR ANDERSON has, during the last quarter century, exercised a powerful influence on philosophical thought in Australia, and especially in Sydney. But since nearly all his published writings have been articles or reviews in *The Australasian Journal of Psychology and Philosophy*, contemporary European and American philosophers have learned little, if anything, of his views. Nor have their activities, during this quarter century, occasioned any conspicuous reactions in him. None the less there are certain interesting parallels to be found between some of his and some of their ideas, as well as certain equally interesting divergences.

I want to bring out and discuss, I hope provocatively, what I take to be the core of Anderson's philosophy. But I should make it plain from the start that I have only his published writings to go on (and not quite all of them). I know nothing at first hand of his unpublished teachings, and I have next to no idea to what extent he has abandoned or modified opinions expressed in his earlier writings. So I may ascribe to him views which his pupils know to be no longer his, and even treat as his abiding premisses what they know to be discarded errors. All my citations are from his articles, reviews and discussions in *The Australasian Journal of Psychology and Philosophy*. I normally refer to these by title and year.

(1) Anderson has been a consistent and strenuous campaigner against all sorts of philosophers' 'ultimates'. Championing a view which he entitles sometimes 'realism', some-

times 'empiricism', he crusades against various sorts of Idealism, Monism, Dualism and Rationalism. When philosophers postulate proprietary entities, such as the Absolute, subsistent universals, *à priori* principles, necessary truths, internal relations, *ad hoc* Faculties, ideas, *sensa* and the like, Anderson assails them. He is, in this respect, a fellow-deflationist with Mach and Ostwald, James and Schiller, the New Realists, Moore, Russell and the Vienna Circle. He bombards some of these when they, in their turn, postulate or argue for factitious entities or principles. There are not any different levels or kinds of existence, such that, for example, scientists explore one of them while philosophers explore another. Whatever exists or occurs exists or occurs in space and time. There is nothing other-worldly to describe. There are only brass tacks.

Were I trying to do justice to the whole of Anderson's thinking, I should have to expatiate on his numerous, very cogent, ingenious and original polemical arguments. His shot and shell do great damage to the positions that he is attacking. Platonic Forms, internal relations and twentieth-century *sensa*, in particular, receive an effective trouncing at his hands. But I am concerning myself not with the fate of inflationist doctrines which have been under fire for so long in both hemispheres, but with one position which is peculiarly Andersonian.

(2) On the other hand, though resembling some of these European thinkers in rejecting the idea that philosophy differs from the sciences in being the science of the other-worldly, he differs from them in refusing to draw a sharp distinction of any other sort between philosophy and science. Indeed, unlike them, he is not much interested in the domestic problem of the rôle and methods of philosophy. Where we in the northern hemisphere have debated, almost *ad nauseam*, the notions of analytic truths, clarification, philosophical analysis, meta-languages, logical syntax and the rest, Anderson seems content to suggest (surely falsely) that doing good philosophy is doing good science, and doing bad (e.g. metaphysical) philosophy is

doing bad science. He says, in a review in 1935, "This work [of extending the interest in philosophy] requires the rejection of both scepticism and 'construction' in favour of *discovery*, and incidentally the removal of any postulated opposition between science and philosophy, which are both concerned with facts"; and, later, "But the philosophical criticism of science is possible not because philosophy has its own province, 'the province of the "ultimate"', but because philosophy is science and has true statements to make about the very things any special scientist is examining—and he will know these things better, i.e. be a better scientist, if he knows their philosophical features"; and "Further, what is called 'method' is not something different from 'findings'; method, which is the same in philosophical as in other science, consists in finding certain relations which things have (e.g. implication) . . ."

(3) The principle from which Anderson derives his Gleichschaltung of philosophy with natural science can be seen operating again, and much more frequently, in his Gleichschaltung of ethical statements with scientific statements. Predicates like 'good', 'bad', 'right', 'wrong' and 'virtuous' must not be construed as signifying other-worldly qualities or relations; therefore, they must be construed as signifying ordinary, this-worldly qualities or relations. To say that something is good is to describe a spatio-temporal situation, just as much as to say that something is hot or red. We find out that things are good or bad in just the same ways as we find out that they are hot or red.

(a) "In a moral judgement, as in any other, something is judged or asserted, i.e. some situation is said to have occurred"; . . . and "statements such as 'This is good' are made, and they must be met or supported in just such ways as would be employed in dealing with the statement 'This is sulphur'." ". . . the logic of moral events is the same as that of any other events". (*Determinism and Ethics* 1928.)

(b) "Extension of knowledge is possible, then, if we view things naturalistically and reject all conceptions of mysterious powers, of ultimates and higher realities. This applies as

much to ethics as to any other science. If there is to be any ethical science, then ethical ultimates or powers, moral agencies above the historical facts, must be rejected. If we are to say significantly that ethics deals with goods, we must be able to exhibit goods as going on, as definitely located activities, just as we exhibit moving bodies or growing plants." "Ethical theory then is not a policy. It consists of propositions to the effect that such and such things are good and that they work in such and such ways. But, of course, a student of ethics may have a policy" "The question for ethics then is to exhibit the working of forces of a specific kind, not to call for approval or support for them." "Goods, as social forces, as forms of organization, are engaged in struggle and develop ways of working in that struggle." (*Realism versus Relativism in Ethics* 1933.)

(c) "Two consistent attitudes can be adopted. One is to deny that goodness is a quality, to take a purely relational view of it, e.g. that it is the demanded The other is to take good simply as a quality, to recognize goods as things existing in certain places and going on in certain ways. On this view, though not on the other, there will be a distinct science of ethics, but it too will be a positive or natural science." "This means that we can acquire a knowledge of good, in particular, only as something upon which we can act and which can act on us—only as something 'natural', present in our environment. Unless good is one description of certain things, helping us to recognize them just as their being green might do, we can have and communicate no knowledge of it—assuming, that is, that it is not something relational; . . ." (*The Meaning of Good* 1942.)

(d) "We learn about goods, as about other things, by observing them; . . ." (*Realism and Some of its Critics* 1930.)

The principle is clear. Ethical predicates are not to stand for any other-worldly qualities or relations; therefore they have to be construed as standing for this-worldly qualities or relations. They signify ordinary, empirically ascertainable properties of things or occurrences or activities. The vocabu-

lary of an encyclopædia of the natural sciences will contain words like 'good' and 'bad' just as it contains words like 'sulphur', 'red' and 'growing'.

Like, for example, some members and followers of the Vienna Circle, Anderson begins by denying that ethical predicates stand for transcendent properties. But while they drew the consequence that ethical predicates do not stand for qualities or relations at all, but are merely emotive or hortatory expressions, Anderson draws the consequence that they stand for empirically ascertainable qualities or relations. Where they said that ethical pronouncements cannot express propositions, since they cannot, in principle, be verified or falsified by observation or experiment, Anderson says that they do express propositions, or describe spatio-temporal situations, and therefore that they are empirically verifiable or falsifiable.

(4) Anderson's general deflationist line of argument comes out very clearly in his early (and I hope outgrown) account of mathematics (*Empiricism* 1927). After attacking idealism and rationalism for making their distinctions between higher and lower truths, higher and lower realities, and the rest, he says, "Thus empiricism regards it as illogical to make such distinctions as that between existence and subsistence or between the 'is' of identity, that of predication and that of membership of a class; and still more obviously illogical to say that there *is* something defective about 'is' itself"; and, later, "Rejecting in this way the distinction between necessary and other truths . . ." and, later, "And all this implies, I maintain, that science depends entirely on observation, i.e. on finding something to be the case, and on the use of syllogism, either for proof or testing; or, more generally, on observation in connection with, and in distinction from, anticipation. This means that there is no distinction between empirical and rational science. Since everything that can be asserted can be denied or doubted, since deduction and hypothesis are always possible, all sciences are observational and experimental."

He then moves on to try to show that geometry is an empirical science. "Our geometrical theorems are themselves the results of careful observation"; "... that geometry is, like all others, an empirical or experimental science, dealing with things of a certain sort, that there is nothing '*a priori*' about it, but that it is concerned throughout with fact." "Geometry, we may say, is concerned with empirical characters and relations of things in space and is a practical science, and Euclidean geometry consists not of 'implications' but of propositions (connected to some extent, of course, by argument) which are either true or false." The finale of this article runs, "And therefore all ideals, ultimates, symbols, agencies and the like are to be rejected, and no such distinction as that of facts and principles, of facts and values, can be maintained. There are only facts, i.e. occurrences in space and time."

In another context he says, "And finally, unless we could find implication as a relation among propositions, i.e. unless implication were a *sensible fact* [A.'s italics], we should never know how to infer." (*Realism and Some of its Critics* 1930.)

(5) What has gone wrong? Why, if Anderson justifiably rejects Platonic or Lockean or Meinongian or Hegelian stories, is he therefore driven to tell his equally impossible stories about mathematics, good and implication? We may approach at least part of the answer in this way.

There is obviously a certain affinity between Anderson's spatio-temporal situations and the atomic facts once patronised by Russell and Wittgenstein. Their completely elementary propositions assert that named particulars have specified qualities or else stand in specified relation to other named particulars. What, in the last resort, i.e. at the terminus of analysis, makes a non-analytic statement true or false is the obtaining of particular matters of fact; and each particular matter of fact is a value of "S is P" or "A is γ to B".

But here an important difference is to be noticed. Russell and Wittgenstein did not suppose that all or most or perhaps

any of the assertions that we actually make are atomic statements. They are, rather, cheques drawn against these solid coins. The statements that we ordinarily make are logically (not necessarily grammatically) highly complex and general. Explicitly or implicitly, they embody conjunctions, quantifiers and variables. So that whereas one atomic proposition can, apparently, differ in form from another only as a simple, singular, affirmative, attributive proposition differs from a simple, singular, affirmative, relational proposition, an ordinary proposition, on the other hand, can differ in form from another in a host of ways—as negative from affirmative, as singular from general, as singly general from multiply general, as conjunctive from disjunctive, as analytic from synthetic, as modal from categorical, and so on indefinitely. Perhaps the bank-till houses only pennies and shillings, but the cheques we draw on this hard cash can differ from these and from one another in an endless variety of ways.

Now Anderson seems to be oblivious to any logical differences save the difference between qualities and relations. His regular touchstone is the question "Quality or Relation?". Is knowing (or willing) a quality? No; so it must be a relation. Is good a relation? No; so it must be a quality.

I do not wish to argue the question whether or not we can produce specimens of elementary propositions; or whether or not the possibility of exhibiting more complex and/or general propositions as compositions of (or operations upon) less complex and/or general propositions entails the existence of a stratum of perfectly simple and completely non-general propositions. Nor do I wish to debate the question whether Anderson is right in thinking that any elementary proposition is either an attributive or a relational proposition, or whether Aristotle was right in thinking that there were six, seven or eight other options. Somebody called 'logic' seems to have confided the dichotomous answer to Anderson, and perhaps she has given him some good reasons for it.

The important thing is that Anderson seldom, if ever, finds occasion even to mention such propositional differences

as those between negative and affirmative; conjunctive, disjunctive and simple; analytic and synthetic. The rôles in arguments of such words as 'any', 'some', 'all', 'most', 'a', 'the', 'if', 'because', 'therefore', 'probably', 'may', 'cannot' etc. go undiscussed and for the most part unmentioned. Yet it is precisely those statements which incorporate these words, or could be reworded so as to incorporate them, that seem patently misconstrued when construed as reporting or describing spatio-temporal situations. Does 'John is not at home' describe the same situation as 'John is at the theatre', or a different situation? Does 'somebody telephoned' give you the same information as 'John telephoned' or different information? Does 'if the glass drops, there will be a gale' report a gale, or any other meteorological occurrence?

That Anderson does intend to construe all assertions after one model is shown by the statement already cited, "In a moral judgement, as in any other, something is judged or asserted, i.e. some situation is said to have occurred." Taken at face value, this assertion requires us to believe that we can never judge or assert that a situation has not occurred, that a situation will occur, that a situation might or cannot occur, that situations of a certain sort can be relied on to occur whenever other specified situations occur, that either situation A has occurred or situation B has occurred, or that either situation A has occurred or it has not occurred. For if we could assert such things, we should be asserting something other than that some situation has occurred. Furthermore, since, when we are told that something has occurred, it is always proper to ask when and where it occurred, we are, by implication, forbidden to make or understand statements to which these questions are not appropriate. But when told that sugar is soluble or that swans are white (as distinct from 'a piece of sugar dissolved' or 'there was a white swan'), we could not significantly ask 'When?' or 'Where?'—since 'anywhere' and 'anywhen' are already connoted by the (tenseless) verbs of such generalisations. So no generalisations or causal laws are true (or even, I suppose, false). It is true that in

his discussion of Causality in 1938, Anderson does not merely allow but insist that particular causal statements rest on universal propositions. "It is natural, then, that, to the question what causes a certain sort of thing, the answer should be 'a certain sort of thing'; it appears that what we are all the time seeking to establish is a general connection, that is to say a universal proposition, to assert which is to assert that something happens invariably." So, presumably, he has wisely given up his principle that in all judgements or assertions "some situation is stated to have occurred". He is here implying that at least one sort of general proposition is not to be construed as a report of a particular spatio-temporal situation or even as a batch of reports of particular spatio-temporal situations. (Why, indeed, should they be? Unlike Reuters, we do not want to learn only what has occurred.)

On the other hand, in 1930 (*Realism and Some of its Critics*) he had said "It has therefore to be recognised that 'This body is fiery', 'This body is hot' and 'Fire is hot' are propositions all of the same order, and their terms are all of the same order." This was said in criticism of the Platonising view that "The idea is of a different order to the thing compared, and cannot in any sense be regarded as another thing alongside these with which they can be compared." So it may merely be an odd way of asserting, what is true, that the universal proposition "Fire is hot" must not be construed as ascribing a temperature (not to these bonfires or those coal fires etc. but) to a 'universal'. However, I think that Anderson does confuse the truth that universal propositions are not attributive or relational propositions about 'universals' with the falsehood that universal propositions can and must be construed as assertions that something has had a quality or a relation somewhere and somewhen. For in *'Universals' and Occurrences* (1929), to which he refers back in this argument, he says, "But when these two propositions ["All lots of sugar are x" and "All lots of sugar, which are introduced into a solvent, are dissolved"] as well as proposition (1) ["All things of the character x, which are introduced into a solvent, are

dissolved"] have been clearly stated, we can see that they are all different, but that nothing has been said to show that they are not occurrences. And so with 'potentiality' in general: if there is in any substance something that we can call a potentiality of it, then its having that potentiality *occurs* [A.'s italics]; . . . Leaving aside potentialities then, and taking the proposition 'Sugar is sweet', . . . we can hardly avoid asserting that the sweetness of sugar occurs in space and time." Anywhen and anywhere? Or on May 12, 1902 in London and June 4, 1910 in Sydney?

Certainly universal statements are not reports of other-worldly states of affairs; but nor are they reports of this-worldly states of affairs. For we report states of affairs in the idiom of—reports of states of affairs. And this is not the idiom of universal statements. Of course there is an important connection between the jobs of universal statements and the jobs of reports of states of affairs, just as there is an important connection between the jobs of spanners and the jobs of bolts. There would be no use for spanners if there were no bolts. But spanners are not bolts, any more than they are transcendent Bolts. The argument that spanners must be ordinary bolts, *because* there aren't any transcendent Bolts, would not take in a child—unless some ill-advised governess had trained him to think only of bolts when anyone mentioned implements, as 'logic' apparently trained Anderson to think only of reports of things' having had qualities or relations when anyone mentions propositions, statements or judgements.

Anderson's logical alphabet is so exiguous that one wonders where he got his 'logic' from. Not from Aristotle, who investigates other inferences than syllogisms and has ten 'categories' where Anderson has two; not from the Stoic logicians who investigated the inferences that hinge on conjunctions; not from Boole, De Morgan, Frege or *Principia Mathematica*. One is at least forcibly reminded of Bradley, who, though he spells the world very differently, spells it out of the same penurious selection of letters. Indeed the con-

nection is, perhaps, more than accidental. For if a philosopher allows himself only an artificially limited set of logical cupboards and pigeon-holes, then when he finds that a lot of his belongings will not readily fit into them, he is tempted to solve his storage-problem by high-handed devices. Either he *deems* his articles to be of the required sizes and shapes, or, if intellectual scruples forbid this, he *deems* his cupboards and pigeon-holes to contain just those secret shelves and interior compartments which will afford the required fit. Sometimes repugnance for the latter device is the motive for resorting to the former, and then we get an Anderson. Sometimes repugnance for the former device, e.g. as practised by Mill, is the motive for resorting to the latter, and then we get a Bradley. The prudent householder has a different policy. He tries to provide his house not with the minimum quantity of storage-places that he can mention in one breath, but with the minimum number that will house the things that he wants or is likely to come to want to store. The question whether at any given stage he needs an extra shelf or cupboard, or whether he needs only to be more careful and clever in packing is always an open one. What we can never say is that we have now, at last, been provided by logic (i.e. logicians) with all the cupboards and pigeon-holes that can ever be needed. Indeed, my own view is that though recent logic (i.e. logicians) has been relatively lavish in providing docketts for propositional differences, it has not yet provided nearly enough to cover the varieties of statements and arguments employed in science, law and ordinary life. Has it (they) provided enough even to cover the propositions of pure mathematics?

It might be said on behalf of Anderson that though he does indeed betray little interest in most of the propositional differences which have occupied contemporary and past logicians, still this indifference does not actually matter. For study of the logic of 'some', 'all', 'any', 'a', 'the', 'and', 'or', 'if', 'can', 'probably' and 'not' etc. is not required for the elucidation of the terms that have concerned Anderson (save that of 'cause'). The realist account of 'John knows so and so'

or 'John's enquiringness is good' is independent of these matters, since the statements cited do not embody any of these words. But this defence will not do. For, as Anderson recognizes for qualities and relations, grammatical similarities can go with logical differences, and grammatical differences can go with logical similarities. A one-verb sentence can express a disjunctive proposition, and a noun-copula-adjective sentence can express an open or variable hypothetical proposition. Why does 'John is my uncle, but he is not my mother's brother' imply that he is my father's brother? Because for John to be my uncle he must be the brother *either* of my mother *or* of my father. Yet 'John is my uncle' does not contain two clauses joined by 'or'.

Take for instance the verb 'to know'. An important part of Anderson's realism consists in his rejection of various idealist theories of knowledge and in their replacement by another, namely by the theory that 'know' signifies not a quality of the knowing person nor a quality of the thing or fact known, but a relation between the person who knows and what he knows. So, to say that John knows so and so is to assert a relational state of affairs concerning John and what he knows. And, in accordance with his general view of situations or states of affairs or facts, Anderson maintains that "in speaking intelligibly of 'knowledge', we are speaking of a certain state of affairs, the mental process which knows as connected with and distinguished from another state of affairs, mental or non-mental, which is known" (*Empiricism* 1927).

Now here, though I do not know that it matters much for his immediate ends, Anderson is quite patently wrong on one point. For 'know' is *never* used for a mental process or for what a mental process does. Singing and panting are processes, and if told that someone has been singing or panting, we can ask how long he has been singing or panting for and whether he has stopped yet. But we cannot ask how long someone has spent in knowing something; nor is knowledge something which can be interrupted or accelerated or resumed.

We can say that someone has known the date of Easter for weeks, but not that he has been knowing it throughout the past three minutes, or that he is (or is not) knowing it now. In these and many other ways 'know' behaves like 'own', and not like 'sing' or 'pant'.

Of course there is the moment of transition from not knowing (or owning) something to knowing (or owning) it. We learn, find out, or are informed of things at specifiable moments, just as we acquire, inherit or are presented with things at specifiable moments. But as we own things from the moment of acquisition to the moment of destruction, sale, donation or distraint, so we know things from the time when we learn them to the time when we forget them or die.

To say that someone owns or knows something is not to say that at this or that particular moment something is going on. But it *is* to say that at *any* moment during the period of possession certain sorts of things *can* go on. The owner *could* give his watch away, pawn it, sell it, throw it away, take proceedings against a thief, and so on; and these would be occurrences. The knower *could* tell someone the date of Easter, scold someone who got it wrong, and so on; and these would be occurrences. But to say of someone that he *could* at *any* moment of a certain described period do something *either* of this sort *or* of that sort, *if* situations of this or that sort were to arise, is to use 'could', 'any', 'some', 'either-or' and 'if'. (And, of course, this expansion of 'knows' and 'owns' is only a promissory sketch. It is not nearly complex enough.)

So 'John knows the date of Easter' certainly does not report a spatio-temporal occurrence—and it does not report a transcendent (attributive or relational) state of affairs either. A theory of knowledge which is indifferent to propositional differences other than that between qualities and relations is without storage-room for those most familiar features of knowledge which control the ordinary grammar of the verb 'to know'.

The same sort of thing is clearly true of implication. To say that a given proposition *p* implies another proposition *q*

is certainly not to affirm 'p-and-q', or even to deny 'p-and-not-q'. It is to say that it *could* not be the case that p, but not-q. And whatever it is that is expressed by 'could not', at least it is not a 'sensible fact'—from which, of course, it does not follow that it is a non-sensible, Meinongian fact. For it does not report a spatio-temporal (relational) situation or report *per impossibile*, a transcendent (relational) situation.

Who knows if 'good' would not also yield to similar treatment, as it certainly does not yield to either the deflationist or the inflationist treatment in terms of qualities and relations?

(6) There remains to be mentioned one further important divergence between the course of Anderson's thinking and that of some European philosophers. When Russell came across the contradiction of the class of all classes that are not members of themselves, and then found the parallel contradictions of 'the Liar' etc., he was forced to look for a solution in some sort of theory of Logical Types. An essential part of this theory consists in the assertion that there can be grammatically well-constructed sentences, of orthodox vocabulary, which do not say anything true or false. They do not express propositions at all. Despite their perfectly regular verbal ingredients and their perfectly regular grammatical constructions, they are meaningless, nonsensical or absurd. And they are meaningless for assignable *reasons*—reasons of the kind which it has always been part of the business of logicians and philosophers to examine. This dichotomy between True-or-False (or Significant) on the one hand and Nonsensical on the other hand was, I think, regarded by Russell himself as of only local importance. It provided a way out of a few quite special embarrassments.

But Wittgenstein, as I construe him, and the Vienna Circle saw in this dichotomy the general clue that they required to the difference between science and philosophy. Science produces true (and sometimes false) statements about the world; philosophy examines the rules or reasons that make some statements (like those of good scientists) true-or-false, and

others (like metaphysicians' statements) nonsensical. Science is concerned with what makes (significant) statements true or else false; philosophy is concerned with what makes them significant or nonsensical. So science talks about the world, while philosophy talks about talk about the world.

In the *Tractatus* Wittgenstein maintained that the things which philosophy wanted to say could not be said. The conditions of significant (true-or-false) assertion could not be the topics of significant assertions. That sentences of different sorts observe or break the rules of significance can be shown but not stated or explained. This doctrine of the ineffability of philosophy was, perhaps, derived from Russell's Type-principle that a proposition cannot be a comment upon itself, or that what a sentence says cannot be a truth or falsehood *about* what it says.

To meet this point, Russell in his foreword to the English translation of the *Tractatus*, pointed out that we, including Wittgenstein, obviously do succeed in saying a lot of the things which, according to Wittgenstein, were unsayable. He suggested that we should distinguish *orders* of talk. First-order talk is about the world; second-order talk is about talk about the world, and so on. No Type-rule is broken by a sentence which comments upon a sentence of a lower order than itself. So philosophical talk could be significant second-order (or higher) talk.

On this showing not all talk about talk would be philosophy. Grammarians, etymologists, teachers of rhetoric etc. talk about uses of language, but they are not doing philosophy. Doing philosophy consists in discussing what can and cannot be *significantly* said, and not what can or cannot be elegantly or idiomatically said.

This view of philosophy proved the more acceptable since it at least seemed so nicely consonant with the actual philosophical practice of G. E. Moore. He, without saying much, if anything, in general terms *about* the procedure of philosophising, had in fact for a long time been conducting his

philosophising by a special sort of examination of the ordinary uses of the words of ordinary language. Abstaining from anything like other-worldly speculations, he had been pertinaciously sifting the ways in which words like 'good', 'perceive', 'can' etc. are actually employed in our everyday (first-order) employments of them. He had been *doing* a special sort of linguistic analysis, and now the generalisation of Russell's dichotomy between True-or-False and Nonsensical made it possible to *state* in general terms what sort of a task this was. 'Nonsense' ceased (or should have ceased, if it did not) to be a vague term of abuse, and became a logicians' category.

Now statements about other statements (when they concern the satisfaction or non-satisfaction by these of the logical conditions of significance), are patently *not* reports of natural occurrences—or, of course, of supernatural occurrences or states of affairs either. So the Gleichschaltung of philosophical with scientific assertions appears, on this showing, to derive from obliviousness to a new and cardinal propositional difference, that between first-order and higher-order propositions, when these higher-order propositions are (not reporters', etymologists' or commentators' propositions but) assessments of the logical propriety or impropriety of the construction of the lower-order sentences.

It would not be true to say that Anderson has nothing to say about the dichotomy between the significant and the nonsensical. Gasking (in *Anderson and the Tractatus Logico-Philosophicus* 1949) makes a valuable and searching examination of the similarities and (much greater) differences between Anderson's and Wittgenstein's treatments of this subject. But it is true, I think, that Anderson does not regard the dichotomy as showing anything important about the differences between doing science and doing philosophy. And it is true, as the citations I have made in my second section show, that at least he used to think that there is no important difference between doing science and doing philosophy. Fortunately Anderson's practice of philosophising has not been governed

by his theory of it. Not one of his articles contains, so far as I can see, the reports of any experiments, the culling of any statistics, the description of any laboratory techniques, the results of any mensurations, or the application of any mathematics; nor is a single prediction vouchsafed, the verification or falsification of which would be a test of the hypothesis behind it. What he actually does is what all other philosophers (even idealists) do. He debates. And he frequently debates extremely cogently. Now cogent debating, of a certain sort, is doing philosophy well, and it is not what good entomologists or astronomers or sociologists necessarily do well.

But I fear that Anderson will reply that debating consists in reporting sensible observations of the occurrences of implications. For 'logic' tells him that implications must be relations, and as they cannot be unearthly relations, they must be earthly relations.

ARCHBISHOP FÉNELON VERSUS MY MOTHER

By D. H. MONRO

I

WILLIAM GODWIN has figured less in the histories of philosophy than in the histories of English literature, as an influence (and, it is quite usual to add, an unfortunate influence) on Shelley and Coleridge. What almost everybody knows about him is that he thought that he ought not to save his own mother or sister from a burning building in preference to someone, like Fénelon, more likely to contribute to the general happiness. (At least he thought that in his first edition. In the second and third he made it "father or brother" as a sop to popular prejudice.)

"The illustrious archbishop of Cambray was of more worth than his valet, and there are few of us that would hesitate to pronounce if his palace were in flames, and the life of only one of them could be preserved, which of the two ought to be preferred Suppose the valet had been my brother, my father or my benefactor. This would not alter the truth of the proposition What magic is there in the pronoun "my", that should justify us in overturning the decisions of impartial truth?"¹

In Godwin's own lifetime this was apparently what most people remembered from *Political Justice*. Lamb refers to him as "counsel for Archbishop Fénelon versus my own mother, in the famous fire cause". But not much has been said about the passage, in spite of its notoriety, except that it shows: (a) the absurdities to which philosophers are driven through trying to be logical, (b) that Godwin was the kind of tight-lipped moralist who is blind to what makes life really valuable.

¹ *Enquiry Concerning Political Justice*, 3rd ed. 1798, v. 1, p. 127. All quotations are from this edition.

And it is sometimes added that the conclusion was so absurd that even Godwin could not hold it for long; he expressly withdrew it in his later writings.

None of this is fair to Godwin. It is true that he did not remain satisfied with the position he had reached here, but neither did he simply recant. He was grappling with a genuine problem, a kind of Kantian antinomy of Ethics, and he saw that its solution would go to the heart of moral philosophy. Should we trust to affection or to justice, when they seem to conflict? To decide either way seems to offend our moral consciousness. Rousseau touches on the problem when he speaks of pardons. A pardon is a particular act, which is not merely the application of a general rule: it is indeed its nature to be a violation of a general rule. It is therefore, on Rousseau's principles, not within the competency of either the sovereign, who is concerned only with general principles, or the magistrate, who is concerned only with their application to particular cases. It would seem to follow that criminals should never be pardoned. But Rousseau shrinks from this conclusion: "I feel my heart protesting and restraining my pen; let us leave these questions to the just man who has never offended and would himself stand in no need of pardon."²

It was not Godwin's way to shirk such problems. If the promptings of the heart really conflict with reason, we must decide in favour of reason. And Godwin does indeed condemn the current practice of pardoning. "What are the sentiments in this respect that are alone worthy of a rational being? Give me that, and that only, which without injustice you cannot refuse. More than justice it would be disgraceful for me to ask, and you to bestow."³

So far we seem to have the tight-lipped moralist once again. But that is not all. Godwin sees clearly enough why men are disposed to pardon. It is because they realise, though

² *Social Contract*, Book II, Chapter 5.

³ *Political Justice*, 3rd ed., v. 2, p. 419.

confusedly, that the punishment was not, in the first place, really just. It is merely muddle-headed to affirm with one breath that it is right to punish a man, and with the next that it is right to pardon him. We must not say that justice and benevolence are opposed here, and that justice is an inferior principle. If we are to have a consistent moral philosophy, the two must be reconciled; and they can only be reconciled by a truer conception of justice. To punish and to pardon cannot both be right; but Godwin's final conclusion is that it is punishment that is wrong.

Rousseau's dilemma, Godwin suggests, points to a fundamental defect in his whole political theory. Rousseau's basic assumption is that the rule of law must be right. The sovereign people cannot go wrong so long as it confines itself to framing general principles which are to be applied impartially to all individuals. It goes wrong only when it makes exceptions in favour of the individual, when it sacrifices the public interest to the private interest. This is the principle of impartiality which Godwin is applying when he comes to consider "the famous fire cause". But, because he is prepared to apply it rigorously, as Rousseau was not, he sees that it is defective. We do not attain to justice by applying general rules, without fear or favour, to particular cases; because general rules never do apply to particular cases.

"There is no maxim more clear than this: every case is a rule to itself. No action of any man was ever the same as any other action or had the same degree of utility and injury. It should seem to be the business of justice to distinguish the qualities of men, and not, which has hitherto been the practice, to confound them The fable of Procrustes presents us with a faint shadow of the perpetual effort of law. In defiance of the great principle of natural philosophy, that there are not so much as two atoms of matter of the same form, through the whole universe, it endeavours to reduce the actions of men, which are composed of a thousand evanescent elements, to one standard."⁴

⁴ *Political Justice*, Book 7, Chapter 8, v. 2, pp. 399-400.

No man has insisted more strenuously on the appeal to reason than Godwin. But the reason to which he appeals is not the tight-lipped morality that lays down rigid formulas. Still less is it the abstract logic that ignores men in its search for Man. Next to the Fénelon fire, the most quoted passage from Godwin is probably the one in which he objects to our telling unwelcome visitors that we are "not at home". But, although Godwin insists, almost as strongly as Kant, on the virtue of truth-telling, and the necessity of absolute sincerity, he does not regard moral rules of this kind as the final deliverances of Reason. They are only "resting-places for the mind", and this is probably his view even of the greatest happiness principle itself. Godwin is well aware that the greatest happiness is itself an abstraction: that there is only the happiness of individuals. The reason to which he pins his faith is, in the last analysis, something like Spinoza's *scientia intuitiva*. We progress from abstract generalisation to grasping the particular in all its particularity.

In the problem of Fénelon and his valet, and in the problem of pardons, Godwin is grappling with the conflict between justice and love. It might seem that he solves the first in favour of justice, and the second in favour of love. But there is no real inconsistency here. No really satisfactory solution of the fire problem is possible, because the situation is inherently evil. The terms of the supposition are that we cannot save both. When we are faced with such hard choices, we are not indeed entitled to consider our own pleasure, if this results in the greater pain of other people. This is the only ground on which Fénelon should be saved: that his continued existence will result in greater happiness, on balance, than his valet's. The valet's son or brother is entitled to consider his own anguish as an item, and a very large item, in the hedonic calculus. But he is wrong to allow his vivid appreciation of this one item to blind him to the greater suffering of others, when that is involved. Godwin did not really revise his opinion about this; but he was worried in case he had given the impression that the affections did not

matter. That was not his meaning. Justice and love are not finally opposed, though they may be on occasions, in an imperfect world. So far as possible, we should remodel the world so that the conflict will not occur. That is why he comes down on the opposite side when considering pardons. Punishment is a human institution: and human institutions can be remodelled. If you have to choose between Fénelon and your father, choose Fénelon; but you ought to try to save both. If you have to choose between the individual and society you may have to choose society; but we cannot remain satisfied with a society that presents us with the choice.

The conflict between justice and love, between the individual and society, between my own happiness and the general happiness: these are the problems with which Godwin is faced in "the famous fire cause". They are the central problems for morals and politics. Godwin may not have solved them; but at least he saw the weaknesses of the contemporary solutions. The magic word "sympathy" will not solve the conflict between egoism and altruism: my sympathy and affection for my father, the valet, may militate against the general happiness instead of contributing to it. Nor is it enough to say that, since I am a member of society, self-love and the love of society are, in the last analysis, the same. Saving Fénelon will, *ex hypothesi*, be for the good of society, and as a member of society I will share in that good; but it would be absurd to suggest that this will compensate me for my personal loss. Nor can we trust to a divinely implanted moral sense, secure that, if only I follow it, I will automatically do whatever makes for the greatest happiness of the greatest number. The impulse to save my father has the fullest approval of the moral sense, if by the moral sense we mean simply an immediate intuitive approval. If by the moral sense we mean our reason when applied to right and wrong, then it yields us only the greatest happiness principle itself. There is no short cut which will tell us intuitively what makes for the greatest happiness.

Godwin, then, arrives at the Utilitarian solution, at about the same time as Bentham, and apparently independently of him. But his Utilitarianism is free from the inconsistencies in which both Bentham and Mill entangled themselves, inconsistencies which, it is often said, were not plainly seen by anyone before Sidgwick. Godwin, though quite as thoroughgoing in his application of the greatest happiness principle as Bentham, saw plainly enough that it could not be based on egoistic hedonism. Partly for this reason, Professor Priestley denies⁵ that Godwin was a Utilitarian at all, but suggests that he was merely using the Utilitarian formulas without really meaning them; his position was "essentially that of Shaftesbury and Hutcheson, and of the Greek tradition", while in some respects he is even closer to Price. The question is partly a verbal one. If Utilitarianism is defined as including egoism and relativism, Godwin was not one; neither was Sidgwick, and it is doubtful if even Mill was. But it seems to me that Godwin went much further than Shaftesbury or Hutcheson. He opposed natural rights, including the right to property, on the grounds that we have no right to anything except what will make for the greatest happiness of the greatest number. He opposed the social contract theory on the ground that promises are not the basis of morality, but are indeed essentially opposed to it. Anything I promise will either make for the general happiness, or against it. In the first case the promise is unnecessary, and in the second case it is wrong. He said of punishment that "an innocent man is the proper subject of it if it tend to good; a guilty man is the proper subject of it under no other point of view."⁶ He summed up his moral theory in just two sentences: "The end of virtue is to add to the sum of pleasurable sensation. The beacon and regulator of virtue is impartiality, that we shall not give that exertion to procure the pleasure of an individual,

⁵ In his edition of *Political Justice*, University of Toronto Press, 1946, v. 3, pp. 15-16.

⁶ *P.J.*, v. 2, p. 327.

which might have been employed in procuring the pleasure of many individuals.”⁷ This principle of impartiality was his nearest approach to the moral sense: it is not essentially different from Bentham’s “every one to count as one, and no one for more than one”. He did indeed, like Sidgwick, regard it as an ultimate moral principle, which could not be deduced from egoism. But it is at least arguable that Godwin was not a confused and half-hearted Utilitarian, but an exceptionally clear-sighted one, who has been much neglected by the historians of Utilitarianism.

II

“The voluntary actions of men originate in their opinions.” This sentence occurs as a kind of refrain throughout the *Enquiry*. Godwin himself obviously regarded this as the most important of the “new, true and valuable ideas”⁸ by means of which he was anxious to reform the world. It has been seized on by his critics as the central fallacy of all his thinking. Godwin, it is said, was a closet philosopher, a professorial politician, who thought he could make men virtuous by arguing with them. He reached the pinnacle of absurdity when he suggested (though tentatively) that the truly virtuous man might be able to restrain his intending murderer by the mere force of reason. “The powers of reason and truth are yet unfathomed.” Godwin, it is said, must of course be excused for not having read Freud or Marx; but the merest acquaintance with the affairs of the world might have taught him that men are creatures of passion and impulse far more than of reason. He must, as Leslie Stephen suggests, have been “a quiet and amiable dreamer”, able “to ignore all inconvenient facts”, whose “opinions were too deeply rooted in abstract speculation to be upset by any storms raging in the region of concrete phenomena”.

Godwin was less innocent of the world than has been supposed. The “summary of principles” at the beginning of

⁷ *P.J.*, v. 2, p. 493.

⁸ Preface to *Caleb Williams*.

Political Justice includes this: "The voluntary actions of men are under the direction of their feelings. Reason is not an independent principle, and has no tendency to excite us to action; in a practical view it is merely a comparison and balancing of different feelings".

Godwin had read Hume and was well acquainted with the view that reason is the slave of the passions. He gives it, indeed, a qualified assent. He had not read Freud, but he fully realised the possibility of rationalisation. ("Nothing is more usual than for a man to impute his actions to honourable motives, when it is nearly demonstrable that they flowed from some corrupt and contemptible source. On the other hand, many persons suppose themselves to be worse than an impartial spectator will find any good reason to believe them." ⁹) He had not read Marx, but one of his principal objects is to show that men's characters and actions are determined by the structure of society.

What becomes, then, of his repeated assertion that the voluntary actions of men originate in their opinions? And how can they be also "under the directions of their feelings"?

Desire, Godwin admits, is in some sense the source of all action. "The things first desired by every thinking being will be agreeable sensation, and the means of agreeable sensation. If he foresee anything that is not apprehended to be pleasure or pain, or the means of pleasure or pain, this will excite no desire, and lead to no voluntary action." ¹⁰

This seems complete psychological hedonism. But the emphasis is on the word *first* in the first sentence. Godwin immediately goes on to modify the doctrine by introducing the principle of association of ideas as laid down by Gay and Hartley. He uses the classic illustration of the miser who, desiring money originally as a means, comes to prize it for its own sake. "Something of this sort happens very early in the history of every passion." Benevolence is in this respect

⁹ *P.J.*, v. 1, p. 63.

¹⁰ *P.J.*, v. 1, p. 424.

no different from avarice. "The good of my neighbour could not, in the first instance, have been chosen, but as the means of agreeable sensation." But, like wealth, or fame, or the drunkard's craving, it speedily becomes a motive in its own right.

But at this point Godwin introduces a fresh consideration. "Thus far", he says, "there is a parallel nature in avarice and benevolence. But ultimately there is a wide difference between them. When once we have entered into so auspicious a path as that of disinterestedness, reflection confirms our choice, in a sense in which it never can confirm any of the factitious passions we have named."

In what sense can reflection confirm our choice? Godwin seems to mean that the greatest happiness principle is immediately apparent to reason. "We find by observation that we are surrounded by beings of the same nature with ourselves. They have the same senses, are susceptible of the same pleasures and pains, capable of being raised to the same excellence, and employed in the same usefulness. We are able in imagination to go out of ourselves and become impartial spectators of the system of which we are a part. We can then make an estimate of their intrinsic and absolute value; and detect the imposition of that self-regard, which would represent our own interest, as of as much value as that of all the world beside."¹¹

The principle of impartiality, then, is an axiom of reason. But it directly contradicts the principle of self-interest, to which our actions must, by an inexorable psychological law, conform. Does this mean that man, though capable of seeing the better course, is inevitably doomed to choose the worse?

The stock Utilitarian solution of this problem was worked out by David Hartley. Hartley's general argument has two main steps. First, it depends mainly on chance whether a man takes pleasure in this thing or in that thing: in the love of his fellow men or in torturing stray cats. More

¹¹ *P.J.*, v. 1, p. 427.

specifically, it depends on the associations, or, as a later generation would put it, on the conditioned reflexes he happens to have formed in the course of his life. It follows that if a celestial or mortal Jeremy Bentham wants him to take pleasure in whatever makes for the greatest happiness of the greatest number, his job is to see that the right associations are formed. This is a surer way than the method of rewards and punishments, because there is now no inducement to obtain the reward without earning it. Virtue now becomes its own reward.

For Hartley, however, the associations between our own happiness and the general happiness are not entirely factitious. It is here that the second step in the argument comes in. The pleasure which comes from these associations, it is argued, is actually more pleasant than that which comes from different associations. In one sense pleasure is purely subjective: you take pleasure in something if that happens (as the result of your past history) to be the sort of thing you like. But it is an objective fact, Hartley claims, that if you had been so conditioned as to like a different kind of thing, your total pleasure would have been either greater or less. The reason for this is that some associations fit together better than others. If you form the elaborate set of associations that results in your taking pleasure in wife-beating, you are necessarily cut off from some other kinds of marital pleasure. And so on. This is of course simply the "integration" theory of ethics, of which Hartley is probably the father.

We have, then, two senses in which self-love and the love of society may be said to be the same. They will be the same for you if you happen to associate your own greatest pleasure with the well-being of others. You may be brought to form this association (strictly this set of associations) by subjection to the group mores, which is of course a process of conditioning. If, on the other hand, you have formed a different set of associations, your interest and that of the community will not coincide. Membership in any community, whatever the mores, will not in itself be enough to ensure that the

requisite associations are formed. It would seem, then, that self-love and the love of society are the same in some communities but not in others.

If, however, we ask which community the egoist would choose to live in, the answer is that he would choose the one in which men are led to identify their own interest with that of others, because this leads to a way of life which is better integrated, and so ultimately more satisfying than any other. In this sense self-love and the love of society are the same in all communities.

The obvious objection to this is that private and public interest plainly do, on occasion, conflict. What are we to say, for example, of the martyr? Hartley would not say, certainly, that the martyr gets more pleasure from his martyrdom than from any alternative course of action, or even that he thinks he will. He would agree that the martyr does not think of pleasure at all. What he does say is that in his (largely unconscious) pursuit of pleasure the martyr has formed the habits of choice that make him, in a particular set of circumstances, choose martyrdom just as the miser may be led to prefer money to the things that money can buy, for the sake of which he first learned to love money. But the miser is plainly being foolish. Are we, then, to say the same of the martyr? I think Hartley would say that the martyr's habits of choice, unlike the miser's, really do make, on the whole, for a fuller and more satisfying life. If, in particular circumstances, they lead to disaster, that is a risk which he has to take, and which is worth taking. But might he not draw back and abandon his principles at the point at which it becomes clear that they make martyrdom inevitable? Would not this be the wise, and, for an egoist, the right course? I think Hartley (who was, let us remember, a determinist) would say that it is not a possible course. It would be possible only if the martyr's habits of choice had not been quite whole-hearted: if there had always been present a vacillating tendency which would itself tend to make him less a whole man, and so less happy. There is a sense, then, in which we can

say that the martyr's life, considered as a whole, is happier than it would have been if he had not been a martyr. But this is not the same as saying that the martyrdom, considered in isolation, is his greatest possible pleasure.

For Hartley, then, the moral sense is a particular mode of organising the associations. In a sense it depends on convention: to act morally is to do something because it is right, and what is thought to be right depends largely on the mores of the community. But the mores themselves embody a (possibly confused) conception of what makes for the greatest good of the agent. One is tempted to say that the individual grows in moral insight in proportion as he comes to realise the connection between right action and personal happiness, and so departs from the mores when he finds them to be confused. But for Hartley "realise" and "insight" are not the right words. We do not see the connection through reason: in almost a literal sense we feel it in our bones. The connection, that is to say, is impressed on us, on our nerve centres, on "the white medullary substance of the brain", through experience. Since the connections are physiological, we cannot say that they may be true or false; but they may be more or less integrated, more or less "consistent with one another, with the frame of our natures, and with the course of the world". In so far as they are integrated, the individual will in fact attain the greatest good of which he is capable. In that sense morality is objective. But we pass from a lesser to a greater integration, not through a process of reason, but through being subjected to the right kind of experience. Participation in the mores of the community forms a large part of this experience, but not the whole of it. It is possible to achieve a different systematisation from the one embodied in the mores; but one does not simply reason one's way out of them.

Godwin retained a good deal of all this; enough to prevent the "reason" he extols from being the passionless, abstract, bloodless faculty most of his critics have thought it. But he did feel it necessary to free Hartley's system "from the scheme

of material automatism with which it was unnecessarily clogged". Moral development, he would say, does not end at the point where Hartley leaves it. To act morally is not merely to act from the motive of doing one's duty: this should be reinforced by a rational insight into the nature of duty. This insight should be generated from the moral sense much as the moral sense itself, in Hartley's scheme, is generated from sympathy, theopathy, "gross self-interest" and the rest.

But what, precisely, will we see into? On Hartley's principles, the answer would seem to be: into the connection between right action and our own greatest happiness. For Godwin the answer is: into the connection between right action and the greatest happiness of the greatest number. But how is it possible to maintain that the moral sense, the habit of associating certain types of action with various sources of happiness for ourselves, should lead to an insight, not into the nature of those connections, but to a connection with something quite different? The short way out of this difficulty is by the route of Bentham and Mill. It is implicit in Hartley's analysis that (not indeed the actions but) the dispositions that make for the happiness of the individual also make for the general happiness. Godwin accepts this, at least as a general rule. Why not, then, say that an insight into the nature of duty will also involve the knowledge of this happy coincidence as well? The famous equation (psychological hedonism = ethical egoism = Utilitarianism) is then complete.

Godwin did, I think, toy with this solution. But there is a difficulty. It is, I suggested, open to Hartley to say that the martyr acts only from the motive of doing his duty, but that he has cultivated the disposition which leads him so to act as the result of a largely unconscious search for pleasure, and that the disposition is of value because it does in fact make for his greatest possible pleasure, not as a direct result of the act of martyrdom, but in the quality of life which the disposition makes possible. But this position is possible for Hartley only because he leaves rational insight out of account.

Once suppose that the martyr is fully conscious of the connection between duty and self-interest, and we can hardly deny that self-interest is in fact his conscious motive. Moreover, it would now seem possible for him, after all, to draw back at the point where it becomes obvious that the path of duty and of self-interest no longer coincide. That is the difference between saying that our actions result from feelings which owe their psychological development and their emotional force to their connection with self-interest, and saying that they result from reasoning about self-interest.

Godwin, then, is driven to adopt a different solution. What he says is briefly this. We are incapable, in the first instance, of desiring anything except as a means to our own pleasure. But that leads us to desire to understand ourselves and our surroundings, if only in order to control them. In gaining understanding we come also to see that our own happiness has no claim to be preferred to anyone else's. We come to see this because it is in some sense a fact, an axiom to be grasped by reason. It may be compared with another principle of reason, that we must accept the conclusion to which the evidence points. Godwin accepts this, not as an ideal, but as a fact about the structure of our minds. If we have really grasped the premises, we cannot but assent to the conclusion. We may contrast this with what happens when we rationalise. Here we assent to a conclusion, not because the evidence points to it, but because we want to accept it on quite other grounds.

For Godwin the principle of impartiality is implicit in reason in much the same way. We cannot understand the universe unless we see "things as they are" (the sub-title, it will be remembered, of one of Godwin's novels). But to see things as they are is necessarily to feel certain emotions towards them. Knowledge is impossible unless we can bring ourselves to adopt "the scientific attitude", the impartial, objective viewpoint. You cannot, for instance, investigate the disease unless you free yourself, in part at least, from horror for it, and regard it coolly as just one of the possibilities

inherent in living tissue. It is a condition of reason that it is impartial, just as it is a condition of reasoning that you follow the argument whithersoever it leads. Neither principle can be proved: they are not, in that sense, facts. But we can hardly reason unless we adopt both of them: to exercise our reason is indeed to adopt them. It is not so much that we draw conclusions about values from the facts as that we are not in a position to learn the facts unless we adopt an attitude that does affect our value judgments. "What magic is there in the pronoun 'my' that should justify us in overturning the decisions of impartial truth?"

There is here a question for the determinist. Our actions, says Godwin, are determined by our opinions, and our opinions are themselves determined. But are they determined by the principle of reason, by the logic of facts, by our inability to dissent from the conclusion once we have really grasped the premises, or are they determined by our desires, by such mental processes as rationalisation?

I think Godwin's answer is that our actions are determined, at least in the first instance, by desire. But they are also determined by reason; it is true that once we have grasped the premises, we cannot but assent to the conclusion. All that is necessary is that we should, in the first instance, have sufficient incentive to exercise our reason. We have this incentive since in general desire prompts us to increase our understanding of things as they are. Once we have formed the habits of mind inseparable from the exercise of reason, we may well follow courses of action that conflict with desire. As reasoning beings we cannot do otherwise, provided that we have really grasped the premises. But this does not mean that rationalisation is impossible. Desire may very well hinder us from grasping the premises; and the obstacle may sometimes be insuperable. That is why it is important that society should, through its institutions, provide us with every possible incentive to see things as they are. The exercise of reason will not indeed lead men to see that their own interests and those of others coincide; because, although this is true in

general, it is not always true. What is necessary is that self-interest should lead men to pursue reason to the point where understanding, at first desired as a means, becomes an end in itself. Once it becomes an end in itself, the principle of impartiality, which is implicit in reason, cannot but assert itself.

We have, then, the paradox that egoism transcends itself. Godwin accepts psychological hedonism as modified by Hartley's associationism, but rejects egoism in favour of Utilitarianism. His position is not without its difficulties. We will not, he says, fully do our duty unless we are able to reason about it, and to reason about duty is not to reason about self-interest. It is, on the contrary, to reason about the greatest happiness of the greatest number. Yet he also says that this can become a motive for us only because of associations with self-interest. We are to become fully conscious of the connection between right actions and the general happiness (and so correct our notions of what actions are right) but not, it would seem, of the connection between the general happiness and our own happiness. Or perhaps we are to be conscious of the general connection and to be motivated by that consciousness, and yet persist in considering the general happiness even when (as in "the famous fire cause") it becomes obvious that the general happiness conflicts with our private and personal happiness.

This seems an impossible position. Perhaps, indeed, it is: it seems unlikely that psychological hedonism is finally compatible with a reasoned utilitarianism. But two points can be made. First of all, if Godwin made a mistake here it was because he was trying to avoid the mistake of which he is generally accused. He realised the importance of the emotional springs of action. (He was indeed able to say quite flatly that "moral reasoning is nothing but the awakening of certain feelings".¹²) He knew that reason must have its appetitive side. He was attracted to Hartley because he seemed

¹² *Memoirs of Mary Wollstonecraft*, (1798), Constable, 1928, p. 89.

to explain how this was possible. When he found that the explanation consisted in denying reason altogether, he tried to amend it. If he did not solve the problem, at least it can be said in his defence that it is not easy to solve.

Secondly, it is unfair to say that Godwin's moral philosophy is a mere *pastiche*: that he took bits from Price, from Hartley, from Hutcheson, from Hume, from Helvétius, from Adam Smith, without bothering to reconcile them. He did work out a detailed and quite subtle reconciliation. Whether or not it is finally satisfactory, it deserves more consideration than it has had. At the very least, it should have earned him a more honourable place in the history of Utilitarianism.

III

I have quoted Godwin's dictum that "moral reasoning is nothing but the awakening of certain feelings". Feelings are not, however, best awakened by exhortation; they come of themselves provided we have sufficient knowledge.

Let us take an example. I may readily agree that it is a bad thing that millions of Asiatics should be starving, and that I ought to do something about it. But in practice I probably won't. We are inclined to say that this is because my purely intellectual apprehension of the facts is not reinforced by any emotional apprehension of them. But now suppose that an Asiatic comes and starves on my doorstep. Almost certainly I shall be moved to feed him. Again it seems reasonable to say that the sight of his sufferings touches my emotions as the mere abstract knowledge of them does not. But more than this is involved. When I see a man starving before my eyes, the proposition: "starvation ought to be relieved" takes on a new meaning for me. I can now see in detail precisely how and why starvation is bad; I can see exactly how the generalisation applies to the particular instance. It is not a question of perfect knowledge being reinforced by emotion; my knowledge before was imperfect. When it becomes perfect, it necessarily brings the emotion

with it: it is no longer possible for desire and emotion to conflict.

Generalisations, then, are inadequate as a guide to the emotions. It is only when we apprehend the particular instance in the light of the generalisation that the appropriate emotions are kindled. The distinction is the one Spinoza makes between *ratio* and *scientia intuitiva*. Godwin insists that "reason" does not stop with general principles (and he is speaking specifically of moral principles).

"It would be preposterous to suppose that, in order to judge fairly, and conduct myself properly, I ought only to look at a thing from a certain distance, and not consider it minutely. On the contrary, I ought, as far as lies in my power, to examine everything upon its own grounds and decide concerning it upon its own merits. To rest in general rules is sometimes a necessity which our imperfection imposes on us, and sometimes the refuge of our indolence; but the true dignity of human reason is, as much as we are able, to go beyond them, to have our faculties in act upon every occasion that occurs, and to conduct ourselves accordingly."¹³

We can now, I think, see why "the famous fire cause" was crucial for Godwin, why he wanted to write a treatise on morals in order to correct the false impression he had made in his handling of that problem. He intended to explain and clarify, not to recant. He did not want to advocate a bloodless reason that turned its back on the human affections. There should be no conflict between the greatest happiness principle and the affections. We should not stifle them in trying to follow the tight-lipped axioms of morality, general rules in which we see only from a distance. The point is rather that we should have as vivid an apprehension of the sufferings of the rest of humanity as of our dearest friends. So far from wishing to sacrifice emotion to reason, Godwin wants reason to be charged with emotion. The greatest happiness principle must become the passion of universal benevolence. But we

¹³ *P.J.*, v. 1, p. 345.

do not achieve this by bringing in emotion as something extraneous to reinforce reason: we must perfect reason itself. When we really see something clearly, instead of "looking at things from a distance", the appropriate emotion comes of itself.

We have already seen the application of this to Rousseau's dilemma about pardons. If benevolence and justice appear to conflict, it is because the benevolence is not true benevolence, or (and this is more likely) because the justice is not true justice. It is for that reason that Godwin approves of the small self-governing community. If a man is to be judged, let him be judged by his friends and neighbours, who know him intimately. They will see his case in its true inwardness: they will be in no danger of applying rules of thumb, which ignore all the circumstances that make every case unique. To understand all is to pardon all; but if we pardon because we understand, the pardon and the judgment do not conflict. We do not commit the absurdity of saying with one breath: "it is right that you should be punished", and with the next: "I shall graciously, in my clemency (that is to say, rightly) refrain from punishing you".

It is not then, reason, but only the rule of thumb, that conflicts with the emotions. That is why Godwin objects so strongly to rules of thumb. "He that believes the most fundamental proposition through the influence of authority does not believe a truth, but a falsehood. The proposition itself he does not understand, for thoroughly to understand it is to perceive the degree of evidence with which it is accompanied; is to know the full meaning of the terms, and by necessary consequence to perceive in what respects they agree or disagree with each other."¹⁴

If we interpret his "reason" in this way, what Godwin says about virtue becomes more intelligible and more consistent. Virtue is good only as a means to the general happiness; on the other hand, the right action is the one that

¹⁴ *P.J.*, v. 2, p. 184.

results from a virtuous disposition. Godwin's point is that the man who does what he mistakenly believes to be his duty is not fully virtuous: at best he is only following rules of thumb; and, since his knowledge is at fault, his disposition is at fault also. A virtuous disposition consists, after all, in feeling the right emotions: in recoiling in horror from cruelty, in sympathising with affection, and so on. The man who, from a mistaken sense of duty, assassinates a tyrant or burns a heretic at the stake or condemns a murderer to the gallows is not feeling the appropriate emotions. He does not really understand the tyrant or the heretic or the murderer; he does not see how their actions follow from their past history and present circumstances. If he did, he would feel towards them only charity. In Spinoza's language, the passive emotions of "righteous indignation" and so forth would be transformed into the active emotion which comes with understanding.

In the long run the general happiness can only be attained if all men feel the right emotions. They are hindered chiefly by the need, in a large and complex society, of general principles as "resting-places for the mind". Hence the first step to virtue is to remodel society so that men will be able to see "things as they are". It is, paradoxically, the implications of "the famous fire cause" that finally led Godwin to renounce the reign of law in favour of anarchism.

PSYCHOLOGY: VIEWPOINT OR SUBJECT-MATTER?

**An analysis of some aspects of O'Neil's discussion
of inner experience and overt behaviour.**

By DUNCAN HOWIE

PROFESSOR O'NEIL argues that the distinction between inner experience and overt behaviour, sharpened to a logical dichotomy, derives rather from the opposition of preferred metaphysical viewpoints (idealism *v.* materialism) than from any real cleavage in the data as such and, when these data are taken as molar behaviour, it will be found that what is valid in mentalistic and behaviour approaches is conserved, so that observation of 'inner' behaviours and 'outer' behaviours will both be necessary for psychology, not as observations of different behaviours but as observations of the same behaviours under different conditions of observation.(5) Thus the vexing antithesis of 'inner' and 'outer' is apparently resolved.

There can be no question that a systematic psychology must somehow overcome the vicious dualism of mental and behavioural, and I welcome Professor O'Neil's acute paper as an effort in this direction. I would agree with his criticisms of the extreme positions and their consequences and I would go a long way with him in his suggested solution, at any rate in adopting the general position that we must view the 'mental' more 'behaviourally' and the 'behavioural' more 'mentally'. But I believe there is some danger in O'Neil's statement of the position that certain matters of importance for psychological inquiry will tend to be blurred. There is something of a re-marriage of convenience of the divorced parties about it; granted that the divorce should never have occurred and was

in fact given on wrong grounds, the re-marriage may not be quite on the right grounds. Specifically, I believe that the insistence that the subjective and objective are observations of the same objects under different conditions takes its stand so firmly in the sameness of the objects that it tends to push into the background the importance for psychological inquiry of the different conditions. I detect a near-physicalist bias in this. This near-physicalist bias I would argue is an outcome of O'Neil's rejection of a viewpoint approach to the problem of indicating the line of psychological inquiry, i.e., as a matter of distinctive attitude taken towards data, rather than a matter of distinctive data or subject-matter. And, finally, I shall try to show that molar behaviour is too ambiguous a concept to provide the distinctive subject-matter O'Neil seeks—that, in effect, the value of this concept lies in fixing a distinctive viewpoint, rather than in any claim that it unambiguously reflects some nature of the subject-matter which necessarily imposes itself on our consideration.

By physicalism I mean a tendency to deal with psychological problems in terms of viewpoints, constructs or methodological requirements characteristic of physical science. The physicist is interested in those aspects of phenomena which may be taken as the common properties of things. It is but one aspect of his quest for common-thing-properties that he adopts techniques which vigorously limit the conditions of observation so as to exclude individual variations in observation and report. From the side of the observer, of course, similar techniques to secure common report will be as necessary for psychology as for physics. Any science must rest upon the commonly reported, and it is the more soundly grounded the closer that common report approaches universality; psychology no less than physics must seek generality. It must, then, be accepted that psychological data must be 'objective', i.e., commonly reported data. But the commonly reported data that the physicist wants are of a particular sort secured under particular requirements. To secure common or general report on thing-properties, the physicist so focusses the direction of

observation as to minimize or exclude the influence of all that may be involved in the individual's concern with the things he is observing. Now, in psychological studies where we are interested in observations from both inner experience and overt behaviour, there are two sorts of observers involved, the first-party observer who reports on his own behaviours, the second-party (e.g., the experimenter) who reports on his observations of the behaviour of others. While for the second-party observer restrictions such as those imposed by physical inquiry must be observed, to require them from the first-party observer, i.e. to preclude his considering all matters of his personal concern or involvement with the stimulus situation, is to evidence a physicalist tendency. Further, for the second-party observer (the experimenter) to limit his observation to such matters as most nearly meet physicalist requirements for report on common-thing-qualities, so to pose his questions and arrange his experiments as to preclude any first-party tendency to report on the lines of his concernment and involvement, is to adopt a physicalist approach, and this is so whether the general line is mentalist or behaviourist. Titchener's proscription of 'stimulus error' is physicalist, as is Watson's use of 'verbal report'. In effect, a physicalist tendency is a tendency to take the line that there is only one possible kind of viewpoint—a viewpoint akin to or equivalent to that adopted by physical inquiry, an interest in common-thing-qualities which excludes personal or organismic involvement, relevancy and concern.* Now it may appear particularly unjustified and ungracious to levy any criticism of physicalist tendency against O'Neil's article, in which he so explicitly rejects any reduction to physiology and equally explicitly insists on the need to use observational data from both inner experience and overt behaviour. It is not suggested that his tendency to physicalism is of an extreme sort, like that of the behaviourists, but indications that "he did something smack, something grow to,

* The organism, person, mental process or behaviour can all be things in this sense, i.e., they can be studied in a physicalist or near-physicalist way.

he had a kind of taste" are, I believe, detectable every now and then throughout his argument, and are more particularly evidenced in his discussion of the Müller-Lyer example.

To say of this phenomenon, in which equal lines may be so presented as almost invariably to appear to the observer as unequal, and even continue to appear as unequal when the observer knows they are equal, "that people experience them as unequal is real, but it is equally the case (i.e. real) that they are making a mistake" (5, p. 32), seems to me to indicate an emphasis characteristic of physicalism. The perception itself can hardly be described as a mistake; it is what it is: the lines are perceived unequal. Of course, it is a mistake in the sense that any more general judgment, as that the lines will be seen unequal apart from the peculiar conditions of their presentation, can easily be shown false by removing the arrow-heads and feather-heads, as also any judgment that the lines are unequal as a matter of physical fact, i.e., as a matter of physical comparison, is negated by applying a ruler to them. These judgments, as physical judgments, are appropriately checked by physical techniques. From the viewpoint of the common-thing-qualities of the lines—what they are as stripped from any reference either to the condition of their perceiving or to what they mean to the perceiver—the Müller-Lyer effect is error. But this is a treatment of the data in the interests of physicalist inquiry. The point of interest for the psychologist is in the perceived inequality, not that this is a mistake, but that it is a psychological fact. It does appear an inadequate recognition of the psychological interest to put the matter in the way O'Neil puts it: "The physicist's only interest in mistakes of this sort is to eliminate them; the psychologist is interested in them because they are part of his subject-matter; he wishes to know how mistakes are made." (5, p. 32.) Looked at in this way the psychological interest might be taken as ancillary to that of physics; when the psychologist has found out how mistakes are made, the physicist will be the better able to eliminate them. Much of the traditional work in psycho-physics is directed by this ancillary interest,

but, however useful and justifiable such work may be, it is a limited aspect of psychological inquiry, restricted to a physicalist or near-physicalist interest. If 'mistakes of this kind' are part of the subject-matter of psychology in a more general sense it is not because they are 'mistakes' but because they afford striking examples of perceptual factors at work, occasioning on the part of observers immediate judgments which are peculiarly psychological, in that they are not directly related to or explicable by the physical properties of the object, i.e., by those common properties revealed by the techniques proper to a physical frame of reference. The fact that from a physical viewpoint the lines are equal, however important for the physicist, is for the psychologist an interest secondary to that of the fact that the lines are perceived unequal. To take a different example: Bruner and Goodman found that a group of poor boys over-estimated the size of coins to a greater degree than did a group of richer boys.(1) Our interest in this finding is not that mistakes were made in judging the size of coins, nor even, primarily, in the kind of mistakes made and how they came to be made, but in the interesting evidence of motivational factors at work in perception. In a quite definite way the interest in comparing the judgments of the two groups is in the 'psychological' size of the coins and not, except in a very secondary way, in their 'physical' size. It does seem inescapable that in these examples we are dealing with a way of looking at the data distinct from that of physics, and a concern with the ontological oneness of the object, such as that two given lines cannot be both equal and unequal, or that a given coin cannot have more than one size, should not preclude the recognition of what in fact occurs—distinctive lines of regard. The distinction does not lie in the ontological nature of the objects dealt with, but in the differing lines of interest of different inquiries which, from among the possible ways in which the object may present itself, reveal itself or be dealt with, make a selection to meet their particular purposes.

So I have the hardihood to believe that after all Titchener had some root of the matter in him: "When one regards these lines as objective fact, i.e., as occurring independently of an experienter, they are to be regarded as equal; when they are taken as the lines that some particular person experiences they are unequal" (5, p. 32). I would, however, object that the perceived inequality would appear on the basis of common report to be as 'objective' as the physical equality. I would admit also that Titchener's use of the word 'independently' is unfortunate in its ambiguity, in that it may be taken to imply an idealist position which O'Neil criticises, a position wherein "inner experience is distinguished by being known, by being constituted in fact by being known" (5, p. 31). We may grant that this way of indicating the line of psychological inquiry will not do; psychology cannot take all knowledge (the known) for its province. But to take Titchener's distinction of psychological data—experience regarded as dependent upon the experienter—as necessarily implying an ontological distinction of the idealist kind, is to lay the emphasis so heavily on 'dependent upon' as to neglect the essential qualification of 'regarded as'. This means that we lose the value of Titchener's distinction as an advance on that of Wundt. To follow Wundt and allot to psychology from initial data the 'raw feels' of concrete 'immediate experience' and to physics the inferred, abstractive, conceptual data of 'mediate experience' is, as O'Neil points out, to deny to physics any ultimate experiential basis, i.e., any final anchoring in the empirically observable.

Titchener would seem to have recognized this difficulty. He saw that the difference between the sciences could not be described as a difference between immediate and mediate experience, but was to be understood as a difference in attitude adopted towards that which is phenomenally given, a difference in the kinds of question asked of experience. Thus: "We find a great difference in the aspects of experience as it is viewed from one or other of our different standpoints. But it is the same experience all through; physics and psychology deal with the same stuff, the same material; the sciences are separated

simply and sufficiently by their point of view" (9, p. 8). Presumably, as "it is the same experience all through", physics and psychology are both dependent upon the experienter in the sense that if there were no experiencers there would be no observations to work on. What I take Titchener to mean is that raw experiential data (phenomenal data) may be regarded, as a matter of relative emphasis, in two alternative ways; one of which, the psychological, has regard to or lays its special emphasis on the experience in relation to the experienter: the other, physics, lays its special emphasis on experience as pointing to or revealing the objects occasioning the experience.

The distinction may be illustrated within a field of physical inquiry. A physicist might be interested in a series of recordings secured from an instrument in two ways. In the first, the recordings themselves are used as data in relation to other sets of observations, as recordings from other instruments or other sources of observations; in the second, the recordings might be considered in relation to the operation of the instrument which made the recordings possible. Now clearly both sets of data are dependent upon the instrument, but there is nevertheless little ambiguity, so long as we emphasise 'regarded as', in describing the first set of observations as 'regarded as independent of the instrument', and the second set as 'regarded as dependent upon the instrument'. Clearly, too, though within the general framework of physical inquiry, there is a distinctive attitude to the data adopted in the two procedures. Is Titchener asking much more than this for the peculiarly intricate observational instrument, the person?

To take an example with possible psychological interest. We could measure a time interval, say twenty seconds, with a stopwatch or some other more refined timing apparatus, or we could secure from a group of individuals their estimates of that time interval. Now, if our interest was in the time-interval as a measure relevant to certain other observations, the use of the individuals' estimates would be a singularly

poor procedure. But if our interest in the time interval was in its relationship to the individual judgments, there might be an appropriate use for such estimates along lines similar, for example, to Sherif's studies in auto-kinetic phenomena.(7) What, then, is the difference between these two kinds of inquiry if not somehow along the lines of Titchener's distinction, or at any rate as involving a recognition of differentiating lines of regard or selective emphasis of aspects? Yet O'Neil poses the problem of Titchener's position thus: "In the case of Titchener one might well ask whether or not experience is dependent upon the experiencer and then reject whichever view (i.e., that of physics or that of psychology) is deemed wrong" (5, p. 32). Stating the question as one of rightness or wrongness, like the similar issue raised about the Müller-Lyer lines, seems to me to be another expression of O'Neil's physicalist leanings. The issue is so stated as to make only one kind of answer possible, and that an answer which precludes an adequate recognition of the rôle of a distinctive line of selective regard in determining the kind of questions psychology may raise. In fact it appears that O'Neil is so much concerned with the danger of dualism that he has difficulty in conceiving how one and the same datum could be viewed in different ways. He remarks: "One suspects, of course, that Titchener did not mean that one and the same bit of experience could be viewed in both ways, but that some bits of experience could be viewed in one way and some in another" (5, p. 32, footnote). Unless I misread Titchener, it is just the first possibility that he did mean. This is stated explicitly enough in the quotation given earlier, ". . . it is the same experience all through; physics and psychology deal with the same stuff . . ." Presumably if the two sciences deal with the same general stuff the bits of the stuff can be viewed in both ways. This would hold for Titchener, at any rate, because he accepts elementaristic analysis and is untroubled by field theory. But apart from Titchener's specialised interpretation I cannot understand O'Neil's difficulty (why "of course"?). Does not O'Neil in his own citation of Titchener's observation about the dual aspect

of the Müller-Lyer phenomenon point to a clear case of a two-fold way of considering the same data? "We can, for instance, look, as Titchener points out, at the Müller-Lyer figure knowing that the two lines are equal. And it is not that the one knowledge necessarily gives way to the other, or even alternates with it, the two may be had together" (5, p. 33). Here clearly an observational datum is simultaneously considered from two different aspects; "one and the same bit of experience" is viewed in both ways. And this particular example is but one example, though a particularly lively and striking one, of the general situation of our coming to know objects. Objects are complexes of possibilities of consideration. They may present themselves, affect us, be entertained, reacted to, thought about or otherwise dealt with in a variety of different ways, as different aspects of them are selected and accentuated in our varied concernments. Water, for example, may be a matter for physical or chemical analysis, but it may also be a matter of thirst-quenching, of æsthetic satisfaction; or it may be a matter of something to bathe in or of something to drown in. Obviously there is a definite sense in which it still remains one and the same object, but this is primarily a physicalist concern. The physicalist interest in common-thing-properties should not preclude consideration of the variety of 'demand characters'. Not all of these, it is true, are equally appropriate for scientific study; many of the possible aspects for consideration may be so localized or restricted to a particular individual here-now frame of reference that they cannot afford the degree of generality that a science requires; other aspects may be of such a nature that they cannot be given precise and unequivocal statement. The possibilities of a line of inquiry achieving the degree of generality and system with the empirical anchorage which will justify it as a science should not, however, be prejudged on the grounds of a philosophical preference for ontological monism, or rejected because of a preference for a different type of selective emphasis, as, e.g., the physical. As Titchener puts it: "In a word, every science takes up a certain attitude towards a world of human

experience, or regards it from a definite point of view, and it is the business of a science to describe the world as it appears after the attitude has been taken up or the point of view adopted. What differentiates the sciences is just this difference in human interest; and what holds a science together is just the fact that the work has been done under the guidance of the same principles and from the same point of view" (9, p. 4).

With all this talk of Titchener it might appear that I am raising a cry of "Back to structuralism". Nothing could be further from my intentions. I agree with the criticism of Titchener's peculiar restriction of psychology to the pure 'whats' of experience in complete exclusion of all that which the experience points to or is concerned with, i.e., to the exclusion of all the behavioural occasion, significance or consequence of such experience. I agree, too, that Titchener in his 'Simon Pure' development of elementaristic analysis of introspective data does effect such a complete severance between inner experience and overt behaviour as O'Neil criticises. But, I believe, recognition of the unfortunate uses to which Titchener put his principle that psychology is grounded on a point of view rather than on a distinctive subject-matter should not lead to the rejection of that principle. Nor need it be construed as necessarily entailing idealistic entanglement. It was pointed out earlier that there is an ambiguity in the phrase 'dependent on' in Titchener's definition of psychology as the science of experience regarded as dependent on the experiencing organism. The phrase can be construed as O'Neil construes it, i.e., as necessarily implying a distinct and unique realm of existence for the mental as against the physical, though I am doubtful whether Titchener in his theory, as apart from his practice, did so construe it. Let us then amend this to read: "as involving, as relevant for or as a concernment of". The word 'experience', too, has got itself into considerable entanglement with idealism, though, again, I do not believe it need necessarily be interpreted in that way; but, pragmatically, I think 'behaviour' is a safer term. So for 'experience' in Titchener's statement let us substitute

'behaviour'. The amended statement would then read something like this: "Psychology is the science of behaviour regarded as involving, as relevant for or as a concernment of the behaving organism." This is not offered as any final definition of psychology, but simply as a pointer to the kind of inquiry which may appropriately be called psychological. In particular I would argue that some kind of viewpoint statement must be associated with any subject-matter statement, whether that subject-matter be experience or behaviour or anything else. Here it is appropriate to consider how far O'Neil's conception of 'molar behaviour' can be justified as affording the distinctive subject-matter for psychology that he seeks.

In attempting to find a place for both inner experience and overt behaviour in a behavioural statement that avoids the two extremes of structuralist analysis to ultimate elements of pure consciousness and behavioural analysis to ultimate physiological elements of effective responses, O'Neil sees the distinctive subject-matter of psychology as molar behaviour. "When extreme views of inner experience and overt behaviour are taken, what sharply distinguishes the two is that the first is embedded in idealism, the second in materialism. When we have disentangled inner experience and overt behaviour from these particular metaphysical preconceptions, it becomes possible to show that those operations which enable us to classify together all the events that comprise inner experience as mental are the features which enable us to classify overt behaviour as molar or other than the simply physiological" (5, p. 39). "Under slightly different terms McDougall and Tolman assert that behaviour is distinguished by such features as being purposive, discriminative and adaptable. It is such marks as these which characterize what is left of inner experience when we have eliminated the confusion arising from the equation of the mental and the known, and which characterize overt behaviour when we regard it as something more than physiological reaction (i.e., when we consider its molar features)" (5, p. 40). . . . "I am not concerned whether these

activities be termed behaviour or mental activity so long as the former is not equated with physiological events and the latter is not regarded as occurring in a realm different from the realm in which the physiological occurs" (5, p. 41).

The description of the kind of matter psychology is interested in as molar behaviour has a considerable pragmatic usefulness, since it does not tempt to either extreme of the 'inner' and 'outer' dualism. But so far as it offers a possibility of synthesis of the thesis and antithesis, it does so, not because molar behaviour is a distinctive sort of behaviour which inevitably constrains its consideration in terms of certain aspects, but because the word *molar* implies a distinctive point of view adopted towards behaviour. If this is not so, it seems to me that mere molarity of behaviour cannot afford the distinctive grounding for psychological inquiry that O'Neil seeks.

Quite narrowly considered, what appears to be involved in the molar as against the molecular is some matter of the kind or degree of analysis applied to complex data. Presumably psychology's consideration of its data cannot rest in mere contemplation of its molarity, but must analyse it in one way or other. Is the effect of such analysis to make it more molecular?*

If it is suggested that such a notion of psychology engaged endlessly in *hara-kiri* makes nonsense, and the matter is one of limits set to analysis, so that, in some sense, the molar is the massively analysed and the molecular or the minutely analysed, how are we to fix limits between the massive and the minute? There could be a range or continuum of the molecular-molar with all sorts of gradations, as, for example, from a physiological study of a restricted organic segment, such as a muscle-nerve preparation, through studies of wider segments of physiological activity and biological studies of

* It may be argued that the analysis is of a different sort, some kind of formal or functional analysis, non-elementaristic and non-reductive, which does not turn away from the event. To adopt a mode of analysis which does not turn away from the event seems, however, to imply a definite attitude taken towards the event. The event in itself would permit various possibilities of analysis.

the intact organism in its behaviour considered primarily as a physico-chemical problem, to the sort of restricted organism-in-environment behaviours preferred by the radical behaviourists, to the kind of molar behaviour in which O'Neil sees the basic subject-matter of psychology. Nor need we stop there. The behaviour of human beings is also a matter that concerns the sociologist. This last poses a problem: is the behaviour studied by the sociologist more molar than that studied by the psychologist? Now it may be admitted that the kind of behaviour psychology studies will occur somewhere within a range and will only occur with the characteristics that are relevant for psychological inquiry within certain limits of analysis, or degrees or kinds of analysis. But on what grounds are we to say: "thus far and no farther"? I cannot see that a distinctive subject-matter for psychology can be determined on a molecular-molar distinction, where the molar means the massive and the molecular means the minute.

It may with some justice be objected that the foregoing is a travesty of O'Neil's position. He is not taking molar as meaning merely the massive as against the more minute, but is claiming that molar behaviour constitutes the distinctive subject-matter of psychology, because behaviour as molar is behaviour of a distinctive sort having distinctive characteristics, for example, being purposive, discriminative and adaptable. The question is, though, how do these distinctive characteristics reveal themselves? Do molar behaviours come to us with these marks on their foreheads in such a fashion that they must be considered exclusively in regard to them? Do the behaviours, because they are molar, so impose themselves on us that they can be regarded in this fashion and no otherwise? If the adjective *molar* is the differentia in the definition of a distinctive sort of behaviour, the answer to the above questions is 'yes'. I do not believe that this position can be sustained.

It is true that from a commonsense point of view certain behaviours do appear to us in this way; we naturally describe or interpret them in terms of such characteristics. Common-

sense is, however, no infallible guide, no direct and 'unbiased seeing' of the object, for commonsense is the precipitate of all sorts of partialities, preconceptions, old mythologies and lapsed philosophies. The line might be taken that an 'enlightened commonsense', freed by critical discipline from its accretion of prejudices, and approaching the observation of behaviour with a phenomenological attitude that lets the behaviour speak for itself, would report such characteristics. Even so, it must be recognized that this approach is not unbiased seeing in Wordsworth's sense of 'wise passiveness', but is a positive, selected attitude adopted towards the object, which allows certain aspects to come through and tends to exclude others, as in this instance facilitating the revealing of molar characteristics and inhibiting the molecular. It is not so much that the molar characteristics necessarily impose themselves upon us, as that we adopt a way of regarding the object which selects and accentuates these aspects. Nor does it follow as any matter of course that characteristics revealed in this way are the most suitable aspects of behaviour for the systematic analysis a science requires. This is, in effect, the line taken by Hull, who admits that as a matter of fact molar behaviour is experienced as having characteristics like purposiveness, but maintains that for purposes of systematic analysis and description aspects of this kind are to be regarded as reducible to more elementary principles. It seems to me a very doubtful ground of objection to Hull that he is ignoring essential aspects of molar behaviour—he is not ignoring them, even if he prefers to deal with them in a way which we consider inappropriate. The objection to Hull is not that he is refusing to deal with the distinctive data of psychology, but that his method of dealing with them is, we believe, inadequate. I suggest that the inadequacy of his method lies in the inadequacy of a viewpoint which fails to provide for considerations such as involvement and concern. I would suggest, then, that 'molar behaviour', not because it is molar, but because it is viewed with regard to its adjustive, discriminative, purposive characteristics, is another way of saying 'behaviour

regarded as involving, as relevant for or as a concernment of the behaving organism'. That is, I claim that the value of the notion of molar behaviour lies not in a claim for a distinctive subject-matter, but in the claim for a distinctive viewpoint. This involvement, relevancy and concernment will not of course be arbitrarily imposed on the data, but in a real sense must be given by the data. It may appear in the upshot that this is not so different a position from O'Neil's claim for distinctive data with their distinctive characteristics. There is, however, a real difference in emphasis. My point is that it is not the characteristics of the distinctive object that determine the inquiry, but it is the distinctive interest of the inquiry which makes focal certain aspects selected from among the manifold possibilities which the object may provide for selective consideration. I believe that there are practical consequences of some importance hanging on this distinction. The emphasis on a distinctive subject-matter may blur the importance of maintaining a consistent directive attitude of a distinctive kind. I see something of this possibility evidenced in O'Neil's article. Of the distinction between knowledge by acquaintance and knowledge about, while rejecting the distinction as one of kinds of knowing, he admits that there is some difference: "although it is easy and perhaps convincing enough to say they are different, it is difficult to say precisely in what they are different" (5, p. 33). I suggest that a quite real and important difference is the degree of personal involvement indicated by the liveliness and full-bodiedness of the one, as against the relative neutrality of the other. The point is made by Newman (among, of course, other claims for the distinction which one need not subscribe to) in his distinction of real and notional assent.(4) It is particularly well illustrated, and its significance for clinical psychology ably developed, by Rogers.(6) It would appear to be a particular value of observations from 'inner experience' or of one's own behaviour, that in general matters of involvement and concernment will here be kept before the psychologist. This type of observation seems to have more to it than merely a further

extension of the field of observations. If observation of ourselves as well as observation of others is necessary for psychology, it is, I believe, largely because it is the observation of ourselves that gives warmth or vitality to the distinctive viewpoint which should guide psychological inquiry. My only justification for saying that such a viewpoint should guide psychology is that psychology, I believe, has most directly and successfully busied itself about its distinctive concerns when it has explicitly or implicitly sustained such a viewpoint. Wundt was fumbling for it, but lost it in trying to establish a distinctive subject-matter. Titchener saw the matter more clearly, but not clearly enough, and under the pressure of his preferred methodology, analytic introspection, developed the guiding notion in an unfortunate way. Gestalt psychology found it necessary to look on psychological events as occurring in a psychological as distinct from a physical environment (Koffka's behavioural environment, Lewin's life-space). In more recent developments, Lewin and Tolman have brought perception back into learning (10), the "new look" functionalists are revitalising the study of perception itself (3), and Sherif and Cantril (8) are pointing the way to a more adequate theory of attitude. There does appear to be something of a renaissance of psychology at the moment, what Brunswick describes as an "era of all manner of convergence and crosspassings" (2) wherein old rigidities and barriers are being broken down—and this I believe is largely due to the growing recognition that the guiding set for investigation will be one which selects and accentuates something of the sort I have described as behaviour regarded as involving, as relevant for, or as a concern of the behaving organism. I believe that, so far as psychologists have allowed their distinctive viewpoint to become blurred (as in attempts to concentrate on a distinctive subject-matter), they have so often asked the wrong questions or wrongly posed the right questions.

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EXCOGITATION AND INDUCTION.

By J. J. C. SMART

WE are all familiar with Hume's distinction between propositions about relations of ideas and propositions about matters of fact, and the consequence: "Let an object be presented to a man of ever so strong natural reason and abilities; if that object be entirely new to him, he will not be able, by the most accurate examination of its sensible qualities, to discover any of its causes or effects. Adam, though his rational faculties be supposed, at the first, entirely perfect, could not have inferred from the fluidity and transparency of water, that it would suffocate him, or from the light and warmth of fire, that it would consume him. No object ever discovers, by the qualities which appear to the senses, either the causes which produced it, or the effects which will arise from it; nor any inference concerning real existence and matters of fact." (*Enquiry*, Section iv, Pt. i.) The point which Hume is making here is of course one of the most important which have ever been made by philosophers, and today we are even more sure of its essential soundness than Hume himself could have been, for we have greater insight into the nature of deductive systems than that which Hume, with his terminology of "Relations of Ideas", ever achieved. Nevertheless there are certain cases in which truths of fact seem to arise simply from pure excogitation, and which hence, at first sight, are troublesome puzzles when we try to see how they fit in with Hume's distinction. Without wishing at all to question the soundness of this distinction, I believe that consideration of the troublesome cases is instructive, and I

propose to consider one such case in this paper.¹ It will bring to light the dependence of science on certain commonsense attitudes and beliefs. In the final paragraph of this paper I shall try to bring out this dependence in a different way.

In his book "The Origins of Modern Science" Professor Herbert Butterfield describes how Galileo came to decide that the Aristotelians were wrong in thinking that a heavy body would fall faster than a light one. Contrary to the usual legends, Galileo did not do it by experiment; indeed it was not Galileo but an Aristotelian who dropped weights from the top of the leaning tower of Pisa, and the results of the experiment were said to have confirmed the Aristotelian view. "Galileo", says Professor Butterfield (op. cit., p. 70), "uses the argument employed by his predecessors—they had reasoned that two tiles each weighing a pound and dropped at the same moment would fall to the ground at precisely the same time. Fastened together, end to end, they would still descend at the pace at which they had fallen when dropped merely side by side. And if one were fastened on the top of the other, still it would not press down more heavily than before, and therefore it would do nothing to press its lower partner to fall more quickly either. In other words, the predecessors of Galileo had reasoned their way to the answer to this particular problem, and neither they nor Galileo showed any willingness to alter the conclusion merely because the experimental method had failed to confirm their judgment." At first sight it looks as though we have here a case of a truth of fact arrived at by pure reason. For it *is* a truth of fact, is it not? We can "conceive the contrary". It makes perfect *sense* to say "so-and-so dropped a 1 lb. ball of lead and a 2 lb. ball of lead at the same time from the top of a tower and the 2 lb. ball reached

¹ There are other cases of this sort of thing—for example, many of the cases in which we argue from symmetry. One case which I do not regard as falling with this group is that of the "Method of Dimensions". Certainly in this case we have the deceptive appearance of empirical truths arrived at purely *a priori*, but otherwise there is no important similarity to the case I discuss. The treatment required would seem to be that given by N. R. Campbell in *Physics, The Elements*, ch. 15.

the ground a considerable time before the 1 lb. ball did". Indeed certain men asserted that something of the sort had in fact happened. But looking at Galileo's "proof" we feel an impulse to say "well, but it just *couldn't* have happened".

Of course we are quite familiar with perfectly straightforward cases in theoretical science where we get surprising conclusions by reasoning. In these cases we are reasoning from a theory and predicting new facts, facts other than those which were the basis of the theory. But then, if the conclusions are not borne out by the facts, we are ready to say "our reasoning was perfectly all right, but there must be something wrong with the theory. The theory needs modifying or replacing". That is, in these cases something other than our reasoning can be wrong. The theory can be wrong. What is puzzling about the case of Galileo is that if his reasoning is not wrong there does not at first sight appear to be anything else that could be wrong.

Perhaps the case is more like the following one. In Euclidean geometry we can prove that the square on the hypotenuse of a right-angled triangle is equal to the sum of the squares on the other two sides. But does this prove that if we construct a right-angled triangle with the sides containing the right angle measured off to be 3 ft. and 4 ft., then if we measure the hypotenuse we shall find it equal to 5 ft.? No, for we can quite well imagine that we measured the third side and found it different from 5 ft. If this sort of thing usually happened we should not find it natural to use Euclidean geometry. We should say that we ought to use some form of non-Euclidean geometry. Of course, if a non-Euclidean geometry was the one we ought to use in such cases there would be a lot of other things in our experience different from what they in fact are. For example, in a drawing office one might be told to draw many parallels to a line, or perhaps one might not be able to understand an order to draw a parallel. Perhaps our very language would be different in certain respects. Nevertheless the situation is by no means entirely inconceivable. Geometry brings out how in making

certain assertions we stand committed to certain other assertions. It shows, for example, how if we explain what is meant by "line", "parallel", etc., in some drawing-office way, and go on to say that one and only one parallel can, as a matter of fact, be drawn (in a non-mathematical, drawing-office, sense of "drawn"), and if we say various other such things, corresponding to certain other of Euclid's axioms, and if furthermore propositions corresponding to the remainder of Euclid's axioms now become logically true (exhibit the logical grammar of the expressions we are using), then we stand committed to, say, a proposition corresponding to Pythagoras' Theorem, in a way not very different from that in which we stand committed to saying that our uncle is our father's brother. Geometry brings out the system in our drawing-office talk (or at any rate of a possible sort of drawing-office talk in a possible world). Geometry unifies, but it does not explain. I do not feel inclined to say, for example, that Euclidean geometry explains the fact that if I measure up the two shorter sides of a right-angled triangle and find their lengths to be 3 ft. and 4 ft. then I shall find that the third side measures 5 ft., in the way that I feel quite ready to say that the kinetic theory of gases explains Boyle's Law or that the wave theory of light explains Newton's rings. Geometry brings out the syntax of our drawing-board talk (or possible drawing-board talk), whereas a physical theory is a structure of theoretical laws, very often relating to transcendental entities, in which case it shows the syntax of words like "molecule", "electromagnetic wave" etc. but not of "pressure", "volume", "lens", "dark ring", etc., which are the words we use when stating the facts to be explained. The theory can be wrong and altered or scrapped, and yet the facts will still be what they were, stated in the same laboratory or observational language. Now what can be wrong if we measure up the two shorter sides of a right-angled triangle and find them 3 ft. and 4 ft. long, and then find that the third side is not 5 ft. long? Nothing can be wrong with the geometry, but we can say that we were using the wrong geometry, that is, if

we don't find it more convenient to say that something has happened to our rulers and compasses. Of course as things in fact are we have already found out in other ways that nothing happens to our rulers and compasses and that Euclidean geometry works perfectly well (these two assertions are of course not altogether logically independent) so that is why we feel quite sure that when we measure the hypotenuse we shall find it 5 ft. long. We are sure because we know what happens when we make other measurements and constructions. Contrast the case of a physical theory. Here we think we know what will happen because we believe the theory, but the new prediction and the old knowledge on which the theory is based are not connected logically except *via* the theory. Theory is not part of the syntax of experimental language in the way that geometry is (or could be) part of the syntax of drawing-board language.

Now let us look once more at Galileo and the falling bodies. What the argument seems to do is to point out to us the similarity between talking about a 2 lb. weight and talking about two 1 lb. weights and to show that if we are to save ourselves from a contradiction (not immediately apparent if we are unaware of his argument) we must make certain physical assumptions (thus destroying the similarity mentioned above) which we should be very unwilling to make and indeed which we should be very surprised to make. Consider the two 1 lb. weights falling. Whether they are near together or far apart does not matter; they reach the ground in the same time. They can be brought nearer and nearer until they touch. Still no change. But now let them be glued together and according to the Aristotelians their acceleration will be (say) doubled. Why *should* this be? Moreover the concept of "being fastened together" is not a precise one. There is being glued together, being tied firmly together with string, being connected by a slack string, being joined by a spider's web. Just where is the extraordinary gravitational change supposed to take place? Again the touching of two interlocking things may or may not be regarded as a case of things

being fastened together. Of course all this only brings out that there are a lot of cases about which the Aristotelian will have to make up his mind. By now, however, we begin to feel sure that it is not going to be a case of the Aristotelian making up his mind about borderline cases but of *giving up his belief* about all cases. Why is this? The answer seems to be somewhat as follows. It is the attitude of common sense to regard discontinuities as things requiring explanation. This common-sense attitude has on the whole been justified by the development of science, though it has had to be given up recently in the domain of quantum phenomena. Galileo was reasoning prior to the emergence of dynamical theory, and had little else to rely on but common sense. We have of course grown up and evolved in a universe where, in the realm of familiar, macroscopic phenomena, discontinuities are exceptional; we can conceive of a universe in which we should not have developed such common-sense attitudes. We must not say that *natura non facit saltus*, for nature does make jumps, but usually we take the continuities as normal and ask for explanations of the discontinuities. There is a temperature at which solid ice becomes liquid water, but we are not satisfied until we can find an explanation of this (the theory of the molecular constitution of matter and the dynamical theory of heat). So what Galileo has done in the case we are considering is to show that the Aristotelian opinion about falling bodies implies a discontinuity somewhere. Such a discontinuity is possible but if it exists it requires an explanation, and we are naturally disposed to believe something which requires no explanation rather than something which seems to require one, especially if we are totally at a loss to imagine what sort of explanation could be given. That is why Galileo is so sure that he must be right without even trying the experiment. On the other hand, we must remember Hume; the opposite is conceivable. Galileo's sureness here is not of a piece with his sureness of a mathematical theorem. Though Galileo's argument is perfectly sound, so far as it goes, his conclusion might (so far as formal logic is concerned) nevertheless be

false. It is logically possible that the Aristotelians should be right, though we find it repugnant to our common sense that they should be right.² (It ought of course to be equally repugnant to the Aristotelians' common sense once they have seen the argument.)

The situation is in some respects like that in which we feel that a phenomenon must be so, for if it is not so we shall have to give up a theory in which we are confident. The situation is different in that Galileo has not a theory to give up; no theory to explain discontinuities is required if there are no discontinuities. All he has to go on is our common-sense methodology which demands an explanation if there are discontinuities, and the fact that he just cannot imagine what plausible explanation could be produced to account for them if there are any. In any case we are predisposed to believe that which requires no explanation. (This is different from being predisposed to believe that which has an explanation, though there are similarities between the two cases.)

We can now also see how the case of Galileo's argument differs from the case of geometry applied to drawing-board experience. Knowing as we do that Euclidean geometry is the one to apply, we can deduce drawing-board facts from drawing-board data. (This must be distinguished from deducing a *theorem* from *axioms*. Here there is no question of knowing or not knowing what geometry we ought to be using.) But though there is deduction there is no explanation, and no question of explanation. The case is different from that of prediction from a theory because there is no explanation, and it is different from the case of Galileo because there is no question of explanation. What Galileo does is to show that the case in question is of the sort we are disposed to regard as "normal", for which we do not ask for an explanation.

² To make my point clear I am for present purposes neglecting the fact that a visit to the top of the Tower of Pisa will (air resistance apart) settle the matter in a different way.

All this brings out how Galileo is relying on our common-sense methodological attitudes as well as on formal logic. His proof is not of the same nature as a geometrical proof of Pythagoras' Theorem. On the other hand, it is not deduction from an inductively established theory. It is of a sort which has been overlooked by logicians. Unfortunately it is now especially tempting to assimilate the case to that of deduction from a theory. Thus it might be said that if the Aristotelian had been right two books glued together would feel heavier than two books held separately. This would be misleading, however. The theory on the basis of which we show that the Aristotelian view is inconsistent with familiar facts would never have been propounded if the Aristotelian law of falling had been correct. Galileo, who had to discuss the law prior to the emergence of dynamical theory, could not have taken such matters into consideration.

One way in which discussion of the above example is instructive is that it brings out the considerable amount of system that there is in our common-sense beliefs. Science has of course erected superstructures of theory on our common-sense language, but it grew out of common language and the language of experiment and observation (in which experimental laws, *e.g.* Boyle's law, as opposed to theoretical laws, *e.g.* Maxwell's equations, are framed) is our common language. There are countless general truths which we just find that we know; we never went through a process of arriving at them, though we can justify them, albeit only in a vague way, by saying "well, it always happens" or "try it yourself". Thus we know that as you run or ride faster the resistance of the air increases, that if you throw a stone up it will come down again, that wood floats in water. Science never began with the programme of establishing such truths inductively from observation of particular instances. It began with the programme of making such general knowledge more precise and of finding explanations for these more precisely stated general propositions. By the time we are adult human beings we have a nose for uniformities, and when we become scientists our

question is nearly always "what law is it?", not "is it a law?". The question "is it a law?" may be illustrated as follows. Having seen that one raven is black and that another raven is black and that yet another raven is black . . . we conjecture as to whether all ravens are black. This is the problem typical of inductive logic books. We know what the "law" would be—namely "all ravens are black". What we do not know is whether the "law" is true. (I put "law" in inverted commas because even if it is true it is not really a law but only a generalisation. We know enough about birds to know that there easily might be exceptions to it, and it would not seriously upset us if we subsequently found exceptions.) In physics the case is different. We know that there is a law connecting, say, the pressure and volume of a gas; we then set out to track it down, and very few experiments may be sufficient to do this. Here again we come to the same conclusion as we came to by another route when we considered Galileo's "*a priori*" argument about falling bodies. Science is an outgrowth from common sense and could not have got started without it. Traditional inductive logic, "the logic of confirmation", may³ be relevant as a critique of common sense, an *ex post facto* discussion of the soundness of our common-sense general beliefs (*e.g.* that air resistance increases as you run faster) but it is not part of the logic of science.

³ It *may*, though I cannot see how.

REVIEW.

A STUDY OF INTERPERSONAL RELATIONS: NEW CONTRIBUTIONS TO PSYCHIATRY. Edited with an introduction by Patrick Mullahy. Hermitage Press, Inc., New York, 1949. Pp. 560. Price, \$6.50.

This volume consists of a number of essays selected from *Psychiatry*, loosely linked in so far as they share a common point of departure, dissident Freudianism. The Freudianism is dissident in two important respects: first, in rejecting the "libido" and the "reductive fallacy" which it incorporates, secondly in rejecting the Freudian emphasis upon biology, and substituting for it an emphasis upon sociology. "Fixed biological needs and their frustration do not provide the locus of mental illness, the social order itself is the ultimate matrix of functional mental disorder" (*Introduction*, p. xxxi). Society is not to be thought of, in the Freudian manner, as "suppressive and external to the person". On the contrary, "the function of society is primarily creative and only secondarily suppressive" (*ibid.*, p. xix). Since this volume is mainly concerned with mental disorder the emphasis is bound to be upon the suppressive aspect of society, at least while the disease is being described, but what, in the end, "cures" the patient is participation in the creative work of society.

In his article on *Memory and Childhood Amnesia*, E. G. Schachtel argues that we forget our childhood experiences not primarily because of their specific content (e.g. because they are sexual in character) but because our adult memory is so organised that it cannot contain "experiences of the quality and intensity of early childhood". He continues: "The world of modern Western civilisation has no use for this type of experience, because such memory, if universal, would explode the restrictive order of this civilisation" (p. 9). We remember in stereotypes, which are fashioned for us by the society in which we live—"The memories of the majority of people come to resemble increasingly the stereotyped answers to a questionnaire" (p. 12). It is the spontaneity of childhood which above all we have to forget.

Similarly, Clara Thompson, in her three articles, is mainly concerned to argue that the neuroses of women cannot be understood in terms of "penis-envy", but only by taking account of their present

position in Western society. Freud made two mistakes: first, as Karen Horney has emphasised, "he saw the woman primarily as the negative of the male" (p. 133), a man *manqué*, so that childbirth, for example, was "a compensation, not something valuable in itself". And secondly, he generalised about women from an experience limited to particular social groups in modern Western culture. (Protest against Freud's account of feminine psychology has been one of the most important stimuli to psycho-sociological investigations. Over a third of the essays in the present volume are written by women; there are few fields of enquiry in which the percentage would be as high.)

This emphasis upon society raises important technical questions for the psychiatrist; the task of defining "mental disorder" and "cure" is complicated when it is no longer assumed, in the manner of the Freudians, that to live easily in our society is a sign of "mental health". In her *Remarks on the Philosophy of Mental Disorder* Freida Fromm-Reichman emphasises this point: "I did not consider it the goal of the treatment for the young woman [her patient] to learn to lead a conventional life with the standard means of social adjustment used by the average so-called healthy citizen in this culture" (p. 163). Yet if "cure" is to be defined in terms of a good life, the psychiatrist is forced to develop an ethic, a task for which he is, often enough, ill equipped.¹

A second consequence, less obvious, is the opening up of new possibilities of treatment to the psycho-therapist. This point is emphasised by Fromm-Reichman; it emerges also in the series of papers on *schizophrenia* (by H. S. Sullivan, H. Staveren, S. S. Tower, R. A. Cohen) with which the volume concludes, and in J. M. Rioch's *The Transference Phenomenon in Psycho-analytic Therapy*. The "inaccessibility" of the psychotic patient and the "meaninglessness" of his actions and utterances are relative to a particular social approach, and a particular criterion of "meaning"; the psychiatrist has to provide the kind of social setting which the psychotic has particularly lacked, the kind of assurance which he needs, and then the "meaning" which at first seemed to be quite absent will abundantly emerge. A person is narcissistic or assaultive in a certain kind of social situation; the psychiatrist has to show him that other kinds of "inter-personal relations" are not, after all, impossible.

H. S. Sullivan (who was, until his recent death, the leader of this school) writes on *Psychiatry*, in an obscure but important paper in which he insists upon the interrelation between culture and personality, as against the view that a human being is "a self-limited unit that

¹ Cf. Erich Fromm's *Man for Himself* and the review of that book by John Mackie in this JOURNAL (Vol. 28, No. 1).

alternates between a state of insular detachment and varying degrees of contact with other people and with cultural entities" (p. 99). There are three papers (somewhat repetitive) by E. D. Hutchinson, two on Insight and one entitled *The Period of Frustration in Creative Endeavour*; it is very doubtful whether they add much (except examples) to Graham Wallas' *The Art of Thought*. Ernest Beaglehole in his *Interpersonal Theory and Social Psychology* emphasises that social psychology must concern itself with individuals in social situations. It cannot content itself with statistical generalisations, as opposed to the historical study of specific situations, nor can it afford to ignore the work of the sociologist, the anthropologist and the psychiatrist. In an important essay on *Cultural Complexity and Psychological Problems* he questions the common view that life in a modern community is "more complex" for the individual than life in a primitive community, in the sense that it involves a greater number of difficult choices. Talcott Parsons has nothing very new to say in his *Sources and Patterns of Aggression* and says it in a somewhat pretentious way; Ruth Benedict in a brief paper on *Continuities and Discontinuities in Cultural Conditioning* derives neurotic adjustments from the failure of our society to provide adequate training, in childhood, for the kind of conduct expected of the adult (from the fact, for example, that sexual activity is condemned in the child and then, suddenly, demanded from the adult). In his *Person, Personality, Group, Culture*, Harold Lasswell attempts to formulate a vocabulary for the study of personality and society; Kingsley Davis in a detailed study of the Mental Hygiene movement draws attention to the individualistic psychology and the individualistic ethic which that movement presumes. Altogether, although these essays are sometimes thin in texture, and one has to endure a good deal of jargon, this is a volume of more than ordinary interest.

JOHN PASSMORE.

AROUND THE JOURNALS.

A. Pap (*Journal of Philosophy*, 47, 13), after discussing the difficulty of defining "logical constant", leads on to the point that the logistic treatment of mathematics does not get rid of synthetic *a priori* propositions, that they reappear in the analyses given of mathematical concepts. Julius Weinberg (*J. Phil.*, 47, 14) criticises attempts to reintroduce the notion of causal efficacy, and suggests that this notion may arise from confused thinking about the deductions that occur within a theory and allow us to predict. In *Analysis*, 16, S. Hampshire argues that a "multiply general statement" such as "every event has a cause" is misleading unless one recognises its logical peculiarity that no "singular statement" entails or is incompatible with it. Two articles in the same number bear critically upon Russell's Theory of Types: N. Lawrence offers a solution of the "heterological" paradox and J. J. C. Smart finds confusions in the notion of "propositional function". In *Mind*, 235, I. Berlin tries to lay the ghost of phenomenism by arguing that material object statements simply do not state what is stated by the phenomenist analyses of them, whether or not the original statements and the analyses strictly entail one another, and P. F. Strawson distinguishes "referring" from "meaning", and so criticises Russell's Theory of Descriptions. In *Philosophy*, 94, T. D. Weldon discusses Ryle's *Concept of Mind*; A. Pap's *Elements of Analytic Philosophy* is reviewed by V. J. McGill (*J. Phil.*, 47, 14), and R. Robinson's *Definition* is reviewed by A. Duncan-Jones (*Mind*, 235).

In *Philosophy*, 94, Dorothy Emmet discusses Alexander's suggestion that "time is the mind of space", and T. M. Forsyth criticises various forms of the theory of Creative Evolution, suggesting that eternity, as well as time, has to be taken seriously. L. J. Rosan's *The Philosophy of Proclus* is favourably reviewed by G. H. Clark (*Philosophical Review*, 351).

The emotive theory of ethics is dealt with in articles by C. L. Stevenson and R. B. Brandt, and in a discussion by J. E. Ledden, who finds support for its negative side in common usage, which permits "anything whatsoever" to be called "good" (all in *Phil. Rev.*, 351).

Jessie Bernard (*J. Phil.*, 47, 17) criticises Northrop's attempt to validate normative social theory. W. H. Sheldon (*J. Phil.*, 47, 10) asserts "the absolute truth of hedonism", mainly on the ground that it is in effect admitted even by the theories which pretend to reject it. J. J. C. Smart (*Philosophy*, 94) says that though there is no such thing as Reason, and though there may be irreconcilable moral disagreements, we have a perfect right to call actions "reasonable" if they accord with the moral rules we adopt, and that this usage of "reasonable" is analogous to others. In the same number B. Mayo advances a hesitant defence of the General Will, but what he defends is very different from what Rousseau propounded. A. N. Prior's *Logic and the Basis of Ethics* is reviewed enthusiastically by C. D. Broad (*Mind*, 235) David Spitz's *Patterns of Anti-Democratic Thought* is thought by H.A.L. (*J. Phil.*, 47, 15) to be good but not topical, since the real enemies of democracy to-day are not the lovers of aristocracy but those who pretend to be democrats, while R.C. (*J. Phil.*, 47, 11) finds J. D. Mabbott's *The State and the Citizen* rather narrow and insular. In *Mind*, 235, H. W. B. Joseph's *Lectures on The Philosophy of Leibniz* is reviewed by Martha Kneale, and E. F. Carritt's *An Introduction to Aesthetics* by John Holloway.

In the *Journal of the History of Ideas*, 11, 3, Aram Vartanian shows how Trembley's discovery of the polyp helped to produce the materialism of La Mettrie, T. S. Hall examines the relations between life and matter in the doctrines of the Presocratics, and P. Merlan argues, on the basis of a study of the structure of Book V of *De Rerum Natura*, that Lucretius is neither a primitivist nor a progressivist.

Volume 30, Part 4, of the *International Journal of Psycho-Analysis* is a "Ferenczi Number", containing some previously unpublished or untranslated articles, notes, letters, etc. of Ferenczi and three articles by his pupils: most of these are concerned with relations between the young child and its parents. R. Peters, in *Analysis*, 17, criticises some recent articles by Toulmin and Flew on the logical status of psycho-analysis, suggesting that these are largely based on misunderstanding, and somewhat similar questions are taken up by H. Fingarette (*J. Phil.*, 47, 18).

BOOKS RECEIVED.

(Mention in this list neither precludes nor guarantees later review.)

FREUD: DICTIONARY OF PSYCHOANALYSIS. Edited by Nandor Fodor and Frank Gaynor. (Philosophical Library, 1950. xii + 208 pp.) Price, \$3.75.

A glossary of the basic psychoanalytic terms as defined and explained by Freud, compiled by selection from his writings.

THE PSYCHOLOGY OF INTELLIGENCE. By Jean Piaget. Translated by Malcolm Piercy and D. E. Berlyne. (Kegan Paul, 1950. viii + 182 pp.) Price (U.K.), 15s.

THE PORTEUS MAZE TEST AND INTELLIGENCE. By Stanley D. Porteus. (Pacific Books, 1950. vi + 194 pp.) Price, \$4.00.

The author argues that recent work in various fields has given new and decisive evidence of the validity of the test.

INTRODUZIONE ALLA PSICOLOGIA. By Fr. Agostino Gemelli and Sac. Giorgio Zimini ("Vita e Pensiero", Milan, 1949. xv + 490 pp.) Lire 1100.

DELINQUENCY AND HUMAN NATURE. By D. H. Stott. (Carnegie United Kingdom Trust, 1950. viii + 460 pp.) Price, 5s. (obtainable only from the publishers, Carnegie United Kingdom Trust, Dunfermline, Fife, Scotland).

A report based on observations made at an Approved School over a period of four years, and including a very large number of case histories, with some discussion and drawing of conclusions.

HUMAN ABILITY. By C. Spearman and Ll. Wynn Jones. (Macmillan, 1950. vii + 198 pp.) Price (U.K.), 16s.

A continuation of *The Abilities of Man*.

REVIEW OF EDUCATION IN AUSTRALIA, 1940-1948. By D. M. Waddington, W. C. Radford and J. A. Keats. (M.U.P., 1950. xix + 258 pp.) Price, 25s.

Prepared by the Australian Council for Educational Research.

AN INTRODUCTION TO SOCIAL ANTHROPOLOGY (Volume I). By Ralph Piddington. (Oliver and Boyd, 1950. xxvi + 442 pp.) Price (U.K.), 25s.

SOCIAL ORGANIZATION. By Robert H. Lowie. (Kegan Paul, 1950. ix + 465 pp.) Price (U.K.), 25s.

WORKERS' CONTROL. (Fabian Society of N.S.W., pamphlet no. 6, 24 pp.) Price, 1s.

A COMMENTARY ON THE CHARTER OF THE UNITED NATIONS. By Norman Bentwich and Andrew Martin. (Kegan Paul, 1950. xxviii + 239 pp.) Price (U.K.), 18s.

THE THINKER'S HANDBOOK. By Hector Hawton. (Watts, 1950. vii + 248 pp.) Price (U.K.), 2s. 6d.

A brief discussion, from the Rationalist point of view, of the main points of controversy between religion and secularism.

THE TASK OF RATIONALISM. By A. Gowans Whyte. (Watts, 1950. 20 pp.) Price (U.K.), 6d.

THE PHILOSOPHY OF MATHEMATICS. By Edward A. Maziarz. (Philosophical Library, 1950. viii + 286 pp.) Price, \$4.00.

A SOVIET HISTORY OF PHILOSOPHY. (The outline of a new volume to replace G. F. Alexandrov's "History of Western European Philosophy", withdrawn from circulation as a result of a philosophical discussion organised in 1947 by the Communist Party of the U.S.S.R.). Translated by William Edgerton. (Public Affairs Press, 1950. 58 pp.) Price, \$1.00.

OUTLINE OF METAPHYSICS. By Franklin J. Matchette. (Philosophical Library, 1949. xiv + 108 pp.) Price, \$3.75.

PARADOXES OF THE INFINITE. By Bernard Bolzano. Translated with an introduction by D. A. Steele. (Kegan Paul, 1950. ix + 189 pp.) Price (U.K.), 21s.

THE PHILOSOPHY OF RELIGION. By William S. Morgan. (Philosophical Library, 1950. xv + 413 pp.) Price, \$6.00.

CHRISTOS: THE RELIGION OF THE FUTURE. By William Kingsland. (Watkins, 1949. xi + 123 pp.) Price, 6s.

THE ORIGINS OF THE NEW TESTAMENT. By Alfred Loisy. Translated by L. P. Jacks. (Allen and Unwin, 1950. 332 pp.) Price (U.K.), 18s.

A HISTORY OF AUTOBIOGRAPHY IN ANTIQUITY. By Georg Misch. (Kegan Paul, 1950. Two Volumes, xii + 706 pp.) Price (U.K.), £2 2s.

An enlarged version of a work first published in German in 1907.

THE EYE LISTENS. By Paul Claudel. Translated by Elsie Pell. (Philosophical Library, 1950. ix + 293 pp.) Price, \$5.00.

A description and interpretation of a large number of works of art.

THE BOND OF BEING. By James F. Anderson. (Herder, 1949. xvi + 341 pp.) Price, \$4.00.

A discussion, from the Thomist point of view, of the metaphysical principle of analogy.

VINDICATION OF RUSKIN. By J. Howard Whitehouse. (Allen and Unwin, 1950. 66 pp, with seven illustrations and a facsimile of a document.) Price (U.K.), 10s.

A defence of Ruskin's character, not of his literary works, which relies somewhat uncritically upon Ruskin's own statements.